$2.00 a Year in Advance.

VOL. XIII. No. 156. Old Series. DECEMBER, 1880. VOL. IX. No. 12. New Series.

THE

CINCINNATI MEDICAL NEWS.

EDITED BY

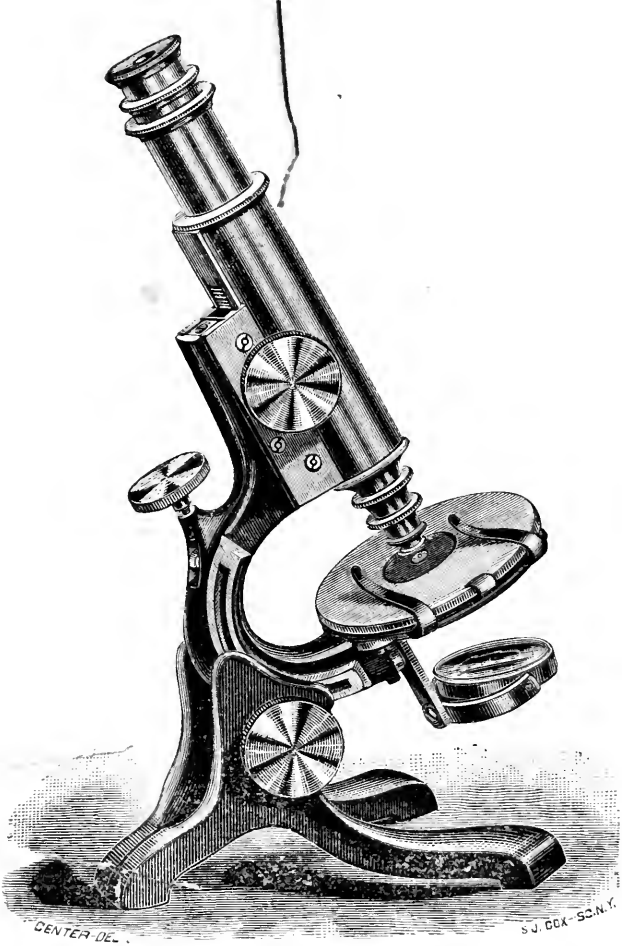
J. A. THACKER, A. M., M. D.

CONTENTS.

CINCINNATI, OHIO:

Published by Dr. J. A. Thacker.

Elm Street Printing Co., 170 and 172 Elm St., Cincinnati.



THE NEW WORKING MICROSCOPE.

This Microscope has just been brought out by Mr. Geo. Wale, whose reputation as a maker of fine stands is so well known. It embodies several new and important features, foremost amongst which is the method of hanging the body, so that it may be made to incline at any angle. The method now in general use for this purpose changes the position of the centre of gravity of the instrument, and renders the microscope more or less unsteady. The new method avoids this difficulty. The stage is of a new construction, very thin, so as to admit the greatest obliquity in the illumination of objects, and with clips which move round it, thus giving many of the advantages of a rotary stage. The clips may be easily and quickly removed, so as to leave a clear stage, and they may also be so applied as to hold the slide against the *under* side of the stage, when very oblique light is required for resolving difficult test objects. The diaphragm is of the Iris pattern, a form which is generally acknowledged to be the best, but which has hitherto been very costly, those usually supplied being sold for $16. This Iris diaphragm is a new form, which, with several other features of this stand, has been patented by Mr. Wale. It may be easily and quickly applied or removed.

This Microscope is of substantial make, elegant design, and thoroughly good workmanship. It has the Society screw; draw tube with Society screw at lower end for receiving long focus objectives, analyzing prism, etc.; plane and concave mirrors, the distance of which from the object may be varied; two Eye-pieces; 2-3 and 1-5 Objectives of Wale's Histological Series. It is very complete in all its appointments, is capable of receiving and doing justice to any accessories, and is contained in a handsome black walnut box, with brass handle, lock and key. It is equal to all the ordinary requirements of any physician, student or naturalist. ☞ *Sold only by the undersigned.*

PRICE—With Accessories, as above described - - - - - $35.00.

Address INDUSTRIAL PUBLICATION CO.,

14 DEY STREET, NEW YORK.

THE

CINCINNATI

MEDICAL NEWS.

EDITED BY

J. A. THACKER, A. M., M. D.

VOL. XIII., Old Series. 1880. VOL. IX., New Series.

CINCINNATI:

PUBLISHED BY J. A. THACKER.

Printed by the Elm Street Printing Company, Nos. 176 & 178 Elm Street.

INDEX, VOL. XIII.

CONTRIBUTORS TO VOL. XIII.

Amick, W. R., M. D., Cincinnati, O.
Atkinson, I. Edmondson, M. D., Professor in the Medical School, University of Maryland, Baltimore, Md.
Barnsfather, James, M. D., Member of Pharmaceutical Association of Great Britain, Pleasureville, Ky.
Bausch, E., Esq., Rochester, N. Y.
Burck, Edward, M. D., Missouri.
Cobleigh, E. A., M. D., Athens, Tenn.
Ellwood, Harvey, M. D., Chester, Pa.
Hackenberg, G. P., M. D., Austin, Tex.
Hamilton, Frank H., M. D., New York.
Karnitzer, J., M. D., Topeka, Kan.
Lawrence, Robert M., M. D., Boston, Mass.
Macdonald, A. E., M. D., Superintendent New York City Asylum.
McIlvaine, R. R., M. D., New York.
Peet, L. R., Esq., Tallahassee, Fla.
Pepper, William, M. D., Professor in University of Pennsylvania.
Reed, Charles, M. D., Hamilton, O.
Reed, R. C. S., M. D., Jones' Station, O.
San Francisco Microscopical Society, San Francisco.
Turnbull, C. S., M. D., Philadelphia, Pa.
Whittaker, James T., M. D., Professor in Medical College of Ohio.

THE

CINCINNATI MEDICAL NEWS.

VOL. XIII. No. 156. Old Series. | DECEMBER, 1880. | VOL. IX. No. 12. New Series.

ORIGINAL CONTRIBUTIONS.

Can a Physician Recommend a Person with a Perforated Membrana Tympani to a Life Insurance Company?

BY W. R. AMICK, M.D., CINCINNATI, O.

THERE are quite a number of people in this world, with a few physicians included, who advocate the doctrine that if a person has a discharge from the ear, it should not be disturbed. The people have a vague idea, in cases of this kind, that if the discharge is stopped, the individual would become a subject for any or all of the various diseases incident to humanity. Should a person have a chronic otorrhœa, and should it be cured by proper treatment, and a week or two subsequently he should have pneumonia, the knowing ones would say, I told you so; I knew all the time that it would never do to stop that discharge from the ear. There are a few physicians who tell their patients with otorrhœa, that it is best to let it alone and leave it to nature. They say that in the system there is effete material which contains a virus that is not only detrimental to the system, but has a toxic effect upon the blood. This virus must be eliminated, and nature, the great physician, recognizing this fact, provides the way and opens up a passage through the membrana tympani, and carries off this material in the shape of an otorrhœa. When the system has been thoroughly renovated, and all of the poisonous material that is in the blood has been removed, then nature will again come to the rescue, stop the discharge and heal the perforation. This is a very

beautiful theory, and one that is calculated to deceive. It is not very difficult to convince a person with otorrhœa, that it would be extremely improper to check the discharge, if you reason like the above, or as follows: My friend, I know that it is very unpleasant to have a discharge from the ear, and no doubt you would like to have it checked, but you have never studied medicine, and you do not understand the *modus operandi* of a disease that produces pus. It is very evident that the pus is in there, or else it could not come out; and, if in there, it should be allowed to escape. If I should stop it from discharging from the ear, it would seek some other outlet, and probably be productive of graver results.

The above may sound tenable, but the fault lies in one of the premises which will not bear analyzing. The statement that the pus is in the ear and should be allowed to escape, is correct in one sense of the term, and incorrect in another. It leads a person not acquainted with the nature of the disease to imagine that there is an abscess or cavity located somewhere at the internal extremity of the canal; that this cavity is filled with pus; that the perforation spoken of is the outlet, and that when all of the pus has escaped from the cavity, that nature will assert her influence and close the perforation, as well as the cavity. Theoretically this sounds very well, and to the uneducated apparently explains the nature of the disease in a very satisfactory manner. But we will examine it a little more closely. Sometimes we see a person who has had an otorrhœa for ten or fifteen years, the discharge being continuous. How large would the cavity have to be to contain that amount of pus? Not in the ear, for it is not large enough. Certainly not in the brain, for death would soon claim the victim. Then, as we can not find a place to locate the cavity, we must explain the cause of the discharge in some other way. In order for us to have a proper understanding of the cause, it will be necessary for us to look at the anatomy of this part of the organ.

The ear, for convenience in describing and studying its various organs, is divided into three parts—the external, middle and internal. The topography is such that the divisions are easily defined. As otorrhœas generally arise from the middle ear or cavity of the tympanum, it will be sufficient for our purpose to give an outline of that

portion of the organ. The tympanum is a cavity about twelve millimeters high, the same in width, and about three millimeters deep. The external wall is formed chiefly by the membrana tympani, or drum-head. The floor is simply a depression or groove between the external and internal walls. The anterior wall is occupied mainly with the the tympanic orifice of the eustachian tube. The internal wall is composed of bone, which divides the cavity of the tympanum from the internal or nervous portion of the ear. In this wall there are two fenestræ—the oval and the round. Into the former we have inserted the base of the stapes, which is the most internal of the little chain of bones that extend from the drum-head to this point. The round window is closed with a membrane. In the posterior wall we have the opening into the mastoid antrum of the temporal bone. The roof is formed by a thin septum of bone, which separates this cavity from the meninges of the brain In some cases this bony septum is absent, leaving only a membranous separation. The various portions of the cavity of the tympanum are lined with mucous membrane, which is continuous through the eustachian tube with the nose and throat, and through the antrum mastoidum with the mastoid cells. This description, which is simply an outline, and does not enter into the minutiæ, is sufficient for our purpose. It shows that, between the tympanum and the brain, there is but a thin partition of bone, covered with mucous membrane upon one side, and the dura mater upon the other. In some instances we have a dehiscence, then there is only a membranous separation. Cases of this kind are very liable to brain trouble when there is tympanal inflammation.

Before we proceed further we will ask, What is a life insurance company? It is a number of individuals each of whom pay an entrance fee to enable the association to obtain enough members to defray the expenses of said organization, or, an association of capitalists, the object being, that a person, by paying a small amount occasionally during the course of life, will be entitled to the benefit of said association, which is that at death their family will receive a certain stipulated sum of money, depending on the amount for which the life was insured. There are certain dues that have to be paid, the principal one being the assessment on losses. The great desideratum of a

company is to be able to show a low mortality rate. This is of itself a recommendation which makes a favorable impression on the general public. To have a low mortality rate, it is necessary to insure healthy individuals. To accomplish this, the company employs physicians, whose duties are to examine the candidates that have been solicited by the agents, and ascertain by a subjective, objective, and physical examination whether the various organs are in a normal condition. After the examination, the physician is required to answer a question somewhat similar to the following: Do you consider the life of this person safely assurable, and do you recommend this company to issue a certificate?

We have seen that the mucous membrane of the tympanum is not exposed directly to the atmosphere. The cavity is ventilated through the eustachian tube, and consequently there is not much variation in the temperature of the air when it enters it. This is a provision of nature to protect the delicate structures in this cavity. But from some cause suppose there is a perforation of the membrana tympani. Then the mucous membrane is exposed directly to cold and draught, and the vicissitudes of the atmosphere. As this delicate structure is not able to withstand the sudden changes thus produced, inflammation is the natural result. Mucous membranes are liable to be affected by sudden changes in temperature, but none more so than that which lines the cavity of the tympanum when exposed by a perforated drum-head.

It may be said that people have been known to live for years with a perforation in the membrana tympani, and no unpleasant or grave results follow. That may be true. People have been known to live for years with a fractured skull, and a portion of the brain removed, and also with organic heart disease. Yet you would not be willing to say that their lease on life was as good as the person whose organs were normal in every respect. Damocles lived, notwithstanding the fact that a sword was suspended over his head by a single hair; but when he discovered it, he could not enjoy the sumptuous feast that was spread before him, for fear that the hair would part, which, in this case, would have been instant death. A person with a perforated drum-head may, and many do, escape, as did Damocles; *but the sword is suspended, and the hair may break.* Would it not be better, at least safer, not to

undertake the experiment, but try and remedy the defect? In the capacity of a physician, could you say to a life insurance company, this man has a perforated drum-head, which at present is not giving him any trouble. It is true, he *may* have an inflammation of the mucous membrane of the tympanum at any time, which might be productive of serious results, but I recommend him as a fit subject for a certificate. Don't you think that the company would incline to the opinion that the conclusion thus drawn would be incompatible with the premises? I think from the above statements they would be very apt to call the risk hazardous.

Suppose a person has a perforation in the membrana tympani, and suppose the action of the atmosphere should irritate and cause an inflammation of the mucous membrane, wherein lies the danger? As we have already stated, the roof of this cavity consists of a thin septum of bone, which lies in juxtaposition with the membranes of the brain upon one side, and the mucous membrane of the tympanum on the other. An inflammation of the latter membrane may continue until it destroys or perforates this septum, and then produce meningitis or cerebral abscess with fatal results; or, the inflammation may extend to the mastoid cells and then destroy the septum, the latter being more prolific of cerebral trouble. In some cases, this inflammatory action may continue for months and years without producing anything more than an annoying otorrhœa. The formation of pus is due to a modification and proliferation of the cellular elements, the amount produced being dependent upon the vascular supply and the degree of stasis. As fast as this proliferation takes place, it is thrown off in the shape of an otorrhœa. This corrects the false premise referred to in the first part of this article. This process may continue indefinitely, progressing no further than a chronic otorrhœa, and the patient finally be carried off by intercurrent trouble after the lapse of years.

Again, after the lapse of years, the septum may be destroyed, the disease extend to the brain, and in a few days or weeks death will claim the victim. In those cases where there is a dehiscence of the septum, the cerebral trouble becomes manifest almost from the commencement of the inflammatory process, the disease extending rapidly from the tympanum to the meninges.

A person with a perforated membrana tympani does not know what the future may develop. He is liable to have an inflammation spring up, and when it has once made its appearance, in the language of Wilde, "*we can never tell how, when or where it will end, or what it may lead to.*"

Fortunately the number of cases that terminate fatally are small, compared with the whole number of cases, but we are unable to differentiate in advance of the disease; *i. e.*, we can not say positively that a person with a perforated membrana tympani, with or without an otorrhœa, will escape without any of the severer complications.

For a corroboration of the statements that we have made, we will quote the first four of a series of cases tabulated by Toynbee:

Case I.—Age of patient, forty-two years. Duration of discharge, thirty-five years. Duration of acute symptoms causing death—pain in the head, ending in coma—five days. *Post-mortem* examination: Pus in the tympanum and labyrinth, and around the medulla oblongata.

Case II.—Age, seventeen years. Duration of discharge, twelve years. Acute symptoms, pain in the head and ear; death in twenty-two days. *Post-mortem:* Pus in the tympanum and labyrinth; auditory nerve of a dark color; purulent matter deposited on the medulla oblongata, crura cerebri and pons varolii.

Case III.—Age, forty-four years. Duration of discharge, twenty-four years. Acute symptoms, paralysis of the portio dura nerve a few days before death. *Post-mortem:* Dura mater covering the upper wall of the tympanum, thick and ulcerated; bone carious; mucous membrane of tympanum ulcerated.

Case IV.—Age, twenty-one years. Duration of discharge, occasionally for fourteen years. Acute symptoms, violent pain in the ear and head; pain in the back and body; curvature of the neck backward; delirium, five weeks; death. *Post-mortem:* Tympanic cavity full of pus; a large abscess in right middle cerebral lobe.

In conclusion, I would simply say, that in this, as in any other case where there is a sufficient amount of proof that can not be gainsaid, the verdict must be in accordance with the evidence. If a person is as safe with as without a perforation in the drum-head, then it is a mat-

ter of little importance. But if it engenders a risk, then the subject is not only entitled to a statement, but to a thorough investigation and examination.

Hog Cholera.

Prepared for the MEDICAL NEWS.

AT the last meeting of the Michigan State Board of Health, Dr. H.B.Baker, Secretary of the Board, was directed to investigate the hog cholera now prevailing in the southwestern part of the State, and to find, if possible, any relation between that disease and any sickness in the human family. In pursuance of that order, Dr. Baker visited Vicksburg in Kalamazoo county, Mendon and Wasepi, and their vicinities in St. Joseph county, and Climax and Leroy in Calhoun county, pursuing his investigations more particularly in the latter township. The statements given below are the conclusions arrived at by Dr. Baker from a collation and comparison of facts obtained, sometimes with the greatest difficulty, in the localities above named, as many of the people do not recognize the disease as hog cholera, and in many instances were unwilling to furnish any information, or aid in an investigation.

The disease prevails in all the above-named localities, and the general impression seems to be that it is spreading east and north. This chances to be in the direction of the prevailing winds, and some are of the opinion that the winds favor its spread. It should be remembered, however, that inasmuch as the disease first struck the southwestern part of the State, if it spreads at all in Michigan, it must necessarily be in that direction. Still, the theory of spread by the wind is worthy of consideration, especially as the cause is known, and appears to be capable of being carried as dust by the wind. Another thing, previously known, was that the disease is communicable. It has also been ascertained that it could be communicated to mice, sheep and chickens, and from each of these back again to the swine, although the disease affected sheep but slightly. Dr. Baker has found evidence in his recent investigations that it may also be communicated to rats, dogs, lambs, colts and cats.

NATURE OF THE DISEASE.

The term "cholera" is a misnomer, except as it conveys an idea of a communicable disease. Contagious typhoid pneumonia would more nearly represent the nature of the disease, but both those terms would probably be misleading unless the mode of communication of the disease is understood, which is by inoculation or by taking the specific virus into the body with the food. It is possible that the disease may be communicated by inhaling the poison, but of this there is not sufficient evidence.

The time which elapses after the entrance of the poison before the disease is noticed is about seven days, but it varies considerably, possibly depending upon the amount of poison introduced and the susceptibility of the system to it. Young animals are most susceptible, and the mortality is greatest among them. The evidence of this was very marked in Dr. Baker's investigations. This is exactly analogous to the communicability of diseases which affect human beings, such as scarlet fever, measles, diphtheria, etc. Some of those who had observed the disease in Leroy township thought it was certainly diphtheria of the hog. Dr. Baker found in other places mention of swelling of the throat and difficulty in swallowing. *Post-mortem* examinations did not reveal signs of diphtheria, however, but did reveal evidence of hog cholera.

THE SYMPTOMS

described in various places varied greatly, but are all easily explained when the nature of the disease is understood. The specific virus circulates through the body wherever the blood goes, and very rapidly reproduces itself. It tends to clog up the smaller blood-vessels throughout the body, and especially in any weak or injured place; therefore the symptoms necessarily differ widely, but the lungs almost uniformly suffer, becoming clogged up in nodules or by entire lobes, in many instances causing death in this manner. Another part of the body next most constantly affected is the large intestine and small intestine near it. Where the glands on the inside of the intestine are enlarged and sometimes ulcerated and inflamed, the adjacent lymphatic glands are enlarged and the stomach is sometimes inflamed. In one case Dr. Baker noticed enlarged spleen, and the liver

had a peculiar purplish appearance. Others have found similar appearances.

From this description, it is easily realized that there is not much hope in medicine being able to eradicate the disease, but as a matter of fact the

FARMERS ARE IMPOSED UPON

all over the country by quacks, and are trying all kinds of remedies. But what is found to answer in one case will not work in the next, indicating that there is no reliance to be placed upon remedies. On the contrary, it is productive of much mischief, as the attempt to keep the animal alive only tends to increase the cause of the disease. Intelligent men say if they had killed all the first animals attacked and placed them four feet under ground, it would have been money in their pockets, by preventing the spread of the disease; but the question of its restriction is very complex, because of its existence among almost all classes of animals, and perhaps in human beings.

NOT RECOGNIZED.

Dr. Baker says the disease is not generally recognized by the people where he went. They say, when the cats have a disease which appears to him the same, that it is consumption. When the dogs had it it was "dog distemper;" when the colts had it it was "epizootic," and when the lambs had it, as they did in some places, they attributed it to feeding on clover, or called it "grub in the head," and cited for proof the fact that after death the "grubs came out of the nose;" but this might occur in summer after death from any disease. The disease is probably spread very largely by mice, rats and cats, which die and lie around unobserved, and to which chickens and hogs have access.

The question which Dr. Baker was especially requested to investigate, whether this disease is

COMMUNICABLE TO MAN,

is attended with much difficulty, because in the neighborhoods where it exists the people are very much afraid, and avoid contact with the disease or eating the meat; but at nearly every point they ship animals of this character, and purchasers only require that the animal shall be alive when put on the cars. They go from there to

Chicago, Detroit, and perhaps to other places, and the difficulty lies in deciding just which pork belongs to animals of that kind. One reason prompting this investigation was that sickness, and in one case death, was attributed to eating sugar-cured ham, in which careful search proved the absence of trichnia. It has been found that

THE POISON OF THE DISEASE

is somewhat easily destroyed, but whether meat from animals that have died of this disease is capable of conveying the disease to human beings who eat it as it is ordinarily prepared, is a question of very great importance, but one upon which conclusive evidence can not yet be obtained. Dr. Baker found one place where the first animals known to be sick were two cats. The next were the chickens, which died very rapidly, and the next was the man of the house, whose symptoms, as described, were not very different from those of the animals. The next were the hogs, not all of which were dead at the time of the doctor's visit. One was killed, and a *post-mortem* revealed hog cholera, every point being verified under the doctor's eyes. At the time of this visit, a son, the only male member of the family remaining, was sick. Whether his sickness bore any relation to the other disease it will be impossible to say, if he lives. Should he die, *post-mortem* might determine the point. Further investigation will be greatly facilitated if persons having any knowledge of this subject will kindly communicate it to the Secretary of the State Board of Health.

Michigan State Board of Health.

Reported for the MEDICAL NEWS.

THE regular quarterly meeting of this Board was held at its office in the State Capitol at Lansing, on Tuesday, October 12, 1880. The following members were present during the meeting: Prof. E. A. Strong, of Grand Rapids; Hon. Le Roy Parker, of Flint; Rev. D. C. Jacokes, of Pontiac; H. F. Lyster, M.D., of Detroit; J. H. Kellogg, M.D., of Battle Creek, and Henry B. Baker, M.D., Secretary.

IMPURE WATER.

Dr. Kellogg reported the completion of his paper on

contamination of water by decaying wood, and mentioned in that connection some observations of his in regard to ice being contaminated by decaying sawdust and other impurities. He showed the fallacy of the popular belief that ice freezes pure, and said that it incloses all organic impurities that float. He described a water-cooler which was designed to avoid contamination of the water by the ice, as would happen if the ice were placed directly in the water. A cylinder containing ice was placed in the center of the cooler, allowing the water to come in contact with this cold cylinder without touching the ice. He also reported progress in studies relative to the work of the new committee to which he was appointed—"the relations of preventable sickness to taxation."

Dr. Baker made a report of the

WORK IN THE SECRETARY'S OFFICE

during the past quarter, which showed the distribution of a large number of annual reports and other documents to officers of local boards of health and other persons. Heretofore documents have usually been sent to the county clerks for distribution to local officers, but having seen that it might be as difficult for some persons to get them from the county clerks' offices as from Lansing, the Secretary sent a circular letter to presidents of villages, asking them whether they wished them sent to county clerks, or if they would pay the express charges if sent to them direct. Of one hundred and two replies, seventy-three desired the packages sent direct, twenty-nine wished them sent to the county clerks, and of the latter, many now lived at or near county seats. Many of these officers expressed great interest in the information contained in the documents of the State Board. From evidence collected at Lansing, it would seem that the documents issued by the State Board of Health are in greater demand than any State documents, with the exception of the reports of the State Board of Agriculture and State Pomological Society.

REGULATION OF MEDICAL PRACTICE.

The Secretary stated that in response to communications relative to the proposed regulation of medical practice, he had prepared a paper and a form for a bill. He submitted an outline of it to the Board. He had done

this heartily, because he feared the State Board of Health would be made the Examining Board, and its usefulness for other important work impaired.

Later in the session, Dr. Lyster spoke on the same subject, and the following resolutions were adopted by the Board:

Resolved, That there should be required of all who are to begin the practice of medicine in this State an examination as to their qualifications.

Resolved, That such examinations by the State should be restricted to questions in demonstrable knowledge as distinguished from questions of mere opinion.

Resolved, That, as a public health measure, a committee of three be appointed to prepare and report at the next meeting of the Board a plan for furthering the objects stated in the preceding resolutions.

Drs. Lyster and Baker and Rev. Dr. Jacokes were appointed such committee.

THE ANNUAL REPORT OF THE SECRETARY,

relative to property received and disposed of during the fiscal year ending Sept. 30, 1880, showed the purchase and placing of meteorological instruments in different parts of the State, the addition of four hundred and fourteen books and pamphlets to the library of the Board, the receipt of weekly and monthly mortality statements from the principal cities in the United States and some foreign countries, the distribution of similar information respecting Lansing and the State; the detailed expenditures of the office, which are classified as follows:

Expenses of members attending meetings, $205.65; instruments and books, $147.11; paper, stationery, etc., $192.51; postage for the office, $581.90; postage by members, $16.30; printing and binding, $389.27; secretary, $2,000; miscellaneous (which includes telegrams, express, freight, etc.), $120.39, making a total expenditure for the fiscal year of $3,653.13.

EXAMINATIONS IN SANITARY SCIENCE.

The Secretary reported that Dr. M. Veenboek, of Grand Rapids, and Henry B. Baker, M.D., of Lansing, the applicants for examination in Sanitary Science by this Board, July 14, both passed the examination, and the Board had since voted to grant them certificates. It was voted to publish the questions asked these candidates, in the re-

port of the Board for 1880. The Secretary reported that, in accordance with instructions from the Board, he had prepared a list of books valuable for reference and study by candidates for the examinations in Sanitary Science, and it was voted to print the list in the annual report for 1880.

OZONE.

An interesting paper, by J. Mulvany, M.D., of the British Navy, giving the results of ozone observations conducted in various parts of the world, was presented, accepted with thanks, and ordered published in the annual report. The paper was read before the Meteorological Society, London, Eng., but not yet published.

REMOVAL OF A SMALL-POX CORPSE.

The Secretary presented a letter describing the method of reinterment, under the direction of the health officer of Lansing, of the body of a person who had died of small-pox.

SANITARY CONVENTIONS.

It was voted to hold two Sanitary Conventions for the reading of papers, discussion of sanitary topics, and the exhibition of sanitary appliances during the coming winter. Rev. Dr. Jacokes and Dr. Baker were appointed a committee to receive invitations and make arrangements for the conventions. Persons desiring a convention at any place, may correspond with either member of the above committee.

Prof. Strong said the convention at Grand Rapids last winter had greatly stimulated public health work in that city.

The Secretary presented an invitation to the International Medical Congress to be held in London, August, 1881.

Dr. Jacokes presented a drawing and description of plan for introducing fresh air to be warmed by a coal stove in the room.

The Secretary was directed to investigate the hog cholera now prevailing in the southwestern part of this State, and find, if possible, any relation between that and any sickness in the human species.

Prof. Strong, the new member, was assigned to work on the committees on the "relations of schools to health," and on "the relations of climate to health."

Dr. Baker presented specimens of pine infected with a fungus, which had completely destroyed the floors of several rooms, constructed of that wood, in a new building. The fungus seemed to grow most where the floor was covered, as with oil-cloth, or by boxes resting on the floor; and in one room the decayed floor corresponded with a portion not exposed to light, though that case may be explained by a greater amount of moisture in that part of the room, because of dampness underneath. The odor in the room was that moldy or musty odor not infrequently met with in close rooms. It caused frontal headache, and a person engaged in repairing the floor had two spells of sneezing on two occasions, some months apart, while thus employed.

The Secretary presented communications from E. P. Christian, M.D., of Wyandotte, relative to diphtheria, etc., and he was instructed to use them in the annual report.

A design for an official seal for the Board was presented by Dr. Baker, and adopted.

Dr. Henry B. Baker was appointed a delegate to the meeting of the American Public Health Association at New Orleans in December.

Auditing of bills and other routine work was accomplished during the day.

The next regular meeting of the Board will be on January 11, 1881.

How Many Functions Does the Uterus Perform?

BY JAMES BARNSFATHER, M.D., M.P.S., ENGLAND.

This is a question concerning which there is a great diversity of opinion. Some say that the uterus has *two* distinct functions, viz.: Menstruation and Utero-gestation. Others say it has more functions. Now, I think that the uterus is subject to the same law that governs all the other organs of the body, viz.: A oneness of action. Who ever heard of the eye performing any other duty than that of seeing? It does this from the beginning to the end, and nothing else. The ear only hears, the stomach only has one duty to perform, so also the lungs, heart, kidneys, bladder, etc. Why then should the uterus be

made an exception to the general rule? To my mind it is not.

Since I wrote my first article on the microscopical character of the menstrual discharge (*vide* Cincinnati Medical News, March, 1875), and its relation to the mucous membrane of the uterus, I have been frequently asked by medical men the question which heads this article, and I have invariably advocated the theory of the *oneness* of action of the uterus. Let us examine this matter for a few minutes, and we will see how many offices it performs. From birth until puberty the young uterus performs no functions. At puberty the uterus commences its work, which it does without or with pain in exact ratio to the normal or abnormal condition of the organ. In menstruation, the organ enlarges, and the lining membrane is shed, either as debris, or in pieces, or sometimes whole (as in membranous dysmenorrhœa, these abnormal conditions being always attended with pain, as the uterus is performing its functions under difficulties). Moreover, we note that the pains in menstruation come and go the same as the pains in parturition. We also notice that the os tincæ dilates to a greater or less extent during the catamenial period, and gradually returns to its former condition at the cessation of the flow. As a matter of course, in parturition we have greater dilatation, and we have its placenta and its attachments thrown off by the contractions of the muscular fibers of the uterus. These fibers perform the same office in the *minor process* of menstruation, as in the *major* or parturient process. Yet their office is *one and the same in both processes.* The post-parturient process of involution is also repeated, in a very slight degree, in the menstrual process.

It is a wise provision of nature, that each part of the animal economy has a certain duty to perform, which it does at all times with unfailing certainty, *modified only by some lesion*, and then it attempts to perform its part, to the best of its ability, by trying to overcome any difficulties or obstructions it may meet with. It is quite natural for the muscular fibers of the uterus to contract at the full term of gestation, in order to expel the contents in its cavity. Following the same rule, it is quite as natural for the muscular fibers to contract, at the minor operation of expelling the degenerated and now useless

membrane, during the term of menstruation. In the major process, we sometimes hear of painless labors, and in the minor process, we frequently hear of painless menstruation. In each case we have the membranes thrown off, with the usual muscular contractions, with this exception, that at the major operation we have a more complete and a more developed membrane thrown off. But let some lesion interfere with the normal action of the uterine muscularia, and then we will have pain, caused by the extraordinary efforts they make to perform their natural function. We find this in cases of version, flexion and dysmenorrhœa in all their forms, down to that most agonizing condition called dysmenorrhœa membranacea, where the membrane is thrown off entire, similar to that in pregnancy, although in a less developed condition. In the major operation, *e. g.*, as in the case of abortion, we have more hemorrhage at the next catamenial flow, as the blood-vessels are more enlarged, and the separation of the membranes are more complete than in the menstrual or minor operation; *but the fundamental principle is the same in both processes.*

In these few remarks, I have confined myself entirely to the uterus proper, and do not include its attachments and appendages.

SELECTIONS.

Mr. Gordon's Paper.

Read before the Managers of Associated Charities of Cincinnati.

MR. GUSTAVUS E. GORDON, of Milwaukee, read a paper on the causes for the little success of philanthropy. Following are the principal points of his address:

I am of the opinion that a careful study of vital statistics will reveal the astonishing fact that one-half of the gross and palpable evil of the world is due *directly* to hereditary causes, and one-quarter more to indirect influences beyond the immediate control of the evil-doer. That organization tyrannizes over character to an extent we can not fathom. I think of this hereditary kingdom of the dead, this triumph of the dead over the living, as *mortmain*, the grasp of the mass of society upon each

separate part, the mortgage that each generation holds upon the succeeding one, and that all generations have upon the present. The *purpose* of this grim attainder is, of course, beyond knowledge, perhaps beyond guess; and the only possible *satisfaction* in it lies in the increased feeling of the *solidality* of the race that is produced by the touch of *mortmain*, the touch of the dead-hand, which, for more or for less, no one wholly escapes feeling.

The law of heredity may be stated thus:

I. The progression of humanity is by fixed and immutable principles, having boundaries across which none can pass.

II. Within these boundaries there is free play on the one side for genius and extraordinary virtues, and on the other for degeneration and marked vices, or—

Speaking by a figure—the tide of humanity rolls ever onward, a slowly widening and deepening stream, now and then falling in magnificent proportions over a massive eminence, with roars and rainbows, and then, losing portions of its bulk by little creeks that steal from its body to lose themselves in stagnant pools or sour morasses.

What concerns us mainly, however, is that while the stream of human life, in its mass and volume, takes care of its own destiny, the diversities from the main current are a matter largely within the concern of man himself. The uniformity is *above* our power, the diversity *within it*.

It has been well shown by Mr. Huxley, Dr. Holmes, Dr. Slane, Dr. Carpenter, Dr. Lucas, M. Morel, Ribot, Francis Galton and others that nothing is more important to the drift of civilization than a proper and worthy estimation of the effects of heredity. It has been constantly shown by these persons, that although "the doctrine of hereditary transmission of qualities, both corporeal and mental, has met with almost universal acceptance among thoughtful minds everywhere, yet it has been almost completely ignored as to its practical bearings by moralists and legislators." (Elam.)

Thoughtful men are convinced of the substantial truth of the proposition of Burbach: "That heritage has in reality more power over our constitution and character than all the influences from without, whether moral or physical;" yet how little notice is taken of the fact as a practical responsibility.

Children are born, reared and educated without reference to this fact. People marry without a thought of the tremendous consequences. Legislation proceeds from imbecility to imbecility; criminals are caught and confined; pauperism flourishes; insanity and idiocy increase; diseases of horrible sorts invade the home. Yet nothing is done to cut off the roots of these disorders *where the roots can be seen.*

I know of no subject which calls for so much thought and observation, and which makes so great a demand upon the conscience of the age, as the one before us. It is a most momentous subject in its relations to the future of America, where everything has been left to work its way in accordance with an enlightened public opinion. But the subject is so large and intricate that I can not hope to do more than draw your attention to its further study and consideration:

I. Physical structure and tendency are transmitted. Agassiz placed on record cases where traces of surgical operations had been transmitted. Monstrosities are frequently reproduced. Peculiarities of gait, gesture and deportment are singularly hereditary.

"This boy," says Dr. Holmes, "sits with his legs crossed, just as his uncle, whom he never saw, used to sit; his grandfathers both died before he was born, but he has the movement of the eyebrows we remember in one, and the hasty temper of the other." Children of very talkative parents are great gabblers. Idiosyncrasies of tastes, likes and dislikes, oddities of expression, and tricks of conduct and behavior, are all more or less hereditary, and are transmitted with great precision.

Hofacker, in Germany, has collected many facts showing that the handwriting of parents is an inheritance in many cases; while Miss Cobbe assures us that "a very characteristic type of writing is traceable in her family through *five* generations." "The liability to die at about a certain age is transmissible." The famous "Turgots" family rarely exceeded fifty years, while the "Querson-niers" had to be killed to die at all; at least many of them lived to over one hundred, and died at last as the results of accidents arising from decrepitude.

Diseases run in ancestral lines—gout, apoplexy, hemorrhages, special inflammations and other forms of disease peculiar to certain families.

II. Intellectual peculiarities and tendencies are transmissible. Galton has shown us in his great work on "Hereditary Genius" that "illustrious men arise oftenest from *families* displaying eminent talents." "Great men," Galton says, "*seem* to arise like islands, isolated and unaccountable; but this is an illusion—they are given to us usually by parents unknown to fame, but still true progenitors of those whose fame is seen, as tops of hills whose extent lies hidden by the obscuring ocean." We have the Tassos, the Kembles, the Coleridges, the Herschels. Legislative ability was transmitted from the elder Pitt and the elder Fox to their sons. Among actors we have the Keans, the Booths and the Matthews families. "Mirabeau, the father, contained, so to speak, Mirabeau the tribune. The family of Æschylus numbered eight poets."

Flaxman and Thorwaldsen were both sons of sculptors. Raphael was the son of a painter. Titian, Vernet and others belonged to artistic families. Mozart's father was a talented violinist. Beethoven was the son of a tenor singer, while the family group of Sebastian Bach numbers over one hundred musicians, by various mothers.

But special intellectual qualities seldom survive longer than four generations, when the family group returns to the common ways of the surrounding world of men and women.

III. A branch of this question, at once interesting and instructive, is that which would be set apart for such hereditary tendencies as affect the sensibilities and emotions.

Do not men inherit their religions? Undoubtedly they do. I suppose that the persistence of superstitions (as we call beliefs in which we do not share) will be largely owing to inherited tendencies to believe and to receive certain forms of emotional expressions. If a young pointer who has never seen a partridge trembles when he is brought into the vicinity of such a bird, how much more shall we tremble and turn pale when we stand before such things as our ancestors, for countless generations, have held in awe? If a child *instinctively*, as we say—that is, by force of heredity—runs from a harmless snake, because, in savage conditions, her ancestors kept up a constant contest with serpents, how much more shall

we dread the thought of meeting with ghosts, whose imaginary presence has haunted the human brain for ages with a nameless dread? Madame de Stael said, when asked if she believed in ghosts, "No, but I am *afraid* of them." I know I do not believe in ghosts, but I know I am afraid of them in unguarded moments. I know scores of "emancipated" people who still believe in unlucky days, and uncanny signs and forebodings, and such like things, by force of hereditary influences they can not shake off.

"The momentum of ages can not be changed in direction in a single life, and if it could the pledges of human progress, which, after all, are based on human *permanence*, would be done away."

IV. But the deepest view we can take of this law of heredity is its effect upon morals. There is an ascertained *uncertainty* about the transmission of high qualities. Intelligence, genius, talent, courage, tact, *may* be passed on with tolerable accuracy from parents to children. Structural difficulties may or may not appear again in offspring. Ordinary diseases may or may not be reproduced. Oddities and idiosyncracies may or may not return again to vex. But one thing seems absolutely *certain*, viz.: "Acquired and habitual vices rarely fail to leave their trace upon the offspring, either in an original or allied form."

The habit of a parent, if it assume the character of a *vice*, becomes the *instinct* of the child, and that, with the presence of corresponding *weakness of will and conscience*. This is a most tremendous fact. And this is the thrilling truth about the inheritance of vice, viz.: That a vicious habit in the parent does not become a habit also in the child, but a *disease*. To illustrate this, I will take a most prominent vice, viz.: Intemperance.

Intemperate parents, or intemperance in a parent, produces in children a direct disease called "dipsomania," and a large group of kindred ills. Dipsomania is not a habit, and can not be treated as such; it is a disease, and is characterized as follows by a recent writer in the *Psychological Journal:* "An impulsive desire for stimulant drinks, uncontrolled by any motives that can be addressed to the reason or conscience, in which the passion for drink is the master passion, and subdues to itself every other desire or faculty." M. Morel, a distinguished French scientist, says: "Hereditary inebriety presents itself with

a *complete abolition of all the moral sentiments.* Families are ruined without a pang of regret, and life ceases to have any claim upon these victims to a father's or a mother's vices."

Intemperance in parents leads to other forms of inherited disease. Out of three hundred idiots examined by Dr. Howe, in Massachusetts, one hundred and forty-five were the children of intemperate parents; and Dr. Down, whose experience in England has been very large, thinks fifty per cent. of idiocy is traceable to intemperate habits on the part of the parents.

Let me sum up, in a brief way, the points I have urged upon your attention:

1. Every functional peculiarity and every feature of peculiar structure may be transmitted to children.

2. Every "habit or aptitude," every trick, idiosyncrasy or eccentricity, may be transmitted.

3. Intellectual endowment or deficiency may be transmitted.

4. Every *well-marked vice* must be transmitted to children, either as it is or in some relative form.

5. The vice of the parent becomes in the child not the habit, but the irresistible impulse or mania.

6. Transmitted vices die away in future generations, through hideous diseases, to idiocy and sterility.

Yet in all this dreary picture there is a ray of hope. This law of heredity is inexorable; it will work its way; but it also works *out* its taint. "If I had made this world," says Colonel Ingersoll, "I would have made *health* catching instead of disease." But the world is made on a different, though not less benevolent, plan. Though disease is catching, and vice hereditary, it is self-destructive. Four generations, or five, of direct inheritance, eradicates vice and its belongings by sterility.

In Dr. Gull's eloquent discourse on "Clinical Observation in Relation to Medicine," he says: "It is now becoming clear that diseases are perverted life processes, and have for their natural history not only a beginning, but a culmination and decline. The effects of disease may be for three or four generations, *but the laws of health are eternal.*"

[*To be continued.*]

On Milk and its Use as a Therapeutic Agent.

BY THOMAS J. GALLAHER, M. D.

MILK is an animal secretion with which we are all familiar; it forms an important article of diet, with most persons, from the commencement to the termination of their lives.

At first the infant draws its nourishment from the maternal breast, but as he passes the period of infancy, the milk he uses for the purposes of nutrition is chiefly obtained from the cow. The milk of other domestic animals, as of the goat, ass, sheep and the mare, is sometimes obtained for a similar purpose. Milk, from whatever source obtained, is a white opaque liquid, homogeneous in character, not coagulable by heat, and capable of separating, on standing, into cream and common milk.

When examined by the microscope, it is found to contain an infinite number of small spherical bodies called milk globules, floating in a transparent liquid. The globules are exceedingly small, varying in size from $\frac{1}{2500}$ to $\frac{1}{1250}$ of an inch in diameter. They consist of butter, either pure or enveloped in caseous membranes of extreme tenuity, and held in suspension by the liquid containing them, in the form of an emulsion, or they are anatomical elements of the milk.

The color and opacity of milk depend upon the presence of these globules, for when they are completely separated by a process of filtration, as has been done by Sir Ashley Cooper and others, the remaining fluid is seen to be transparent.

Milk, no matter from what animal obtained, consists of water, casein, albumen, butter, lactine and a number of inorganic salts, of which the earthly phosphates and alkaline chlorides are the most important. These ingredients vary in their relative proportions in different animals. In comparing human with cow's milk, it is found that the former contains more butter and sugar of milk, while the latter is richer in casein and albumen. Goat's and sheep's milk contain more casein and butter than either that of the cow or human, while the ass' and mare's are richer in sugar and poorer in casein and butter. The amount of lactine in mare's milk is so great that the Tar-

tars, by a process of fermentation, prepare from it a kind of intoxicating drink called "koumiss," which they greatly relish.

Experiments on carnivorous animals show, that when they are fed exclusively on meat, their milk contains abundance of casein and butter, but only a trace of sugar.

Milk is altered in composition by a variety of causes. In the human subject it is well known that the character of the milk is affected by many circumstances with which the mother may be surrounded—the food which she eats, the medicines she takes, the diseases under which she may be suffering and the mental emotions to which she may be subjected. Mothers suffering from consumption yield a milk containing an excess of the salts of lime; those affected with constitutional syphilis so impregnate their milk with the syphilitic poison as to communicate the disease to the nursing infant. Some medicines given the mother act on the child as well as upon herself. Infantile constipation and syphilis are often treated and brought under control in this way; the medicines finding their entrance into the infantile system only through the mother's milk.

Fright, extreme sorrow, sudden joy and other causes of mental disturbance to the mother often cause serious mischief and sometimes sudden death to the infant at her breast. From these and other facts which could be stated, it is evident that the practitioner of medicine can not be too cautious in the selection of wet nurses for children deprived of the maternal breast.

Cows are also known to yield milk differing in the quality and quantity according to their food and drink, and the treatment to which they are subjected. Cows living in country districts, where they have pure air, fine and abundant pasturage and clean water, yield a milk richer in all its ingredients than when they are subjected to opposite conditions. Animals confined and stall-fed give a very inferior milk, having an acid reaction, whereas it should be neutral.

No doubt important changes in the milk of other animals also occur from their methods of living, but these have not been noticed with the same care as those observed in the milk of the human and the cow.

Having thus far treated of milk in general, I wish now

to confine myself to a further consideration of cow's milk alone, unless when otherwise mentioned, its purity and impurities, and its use as a therapeutic agent in some of the diseases afflicting humanity.

Cow's milk is known to possess the property of absorption in an eminent degree, and this absorbing power is known to reside chiefly, if not exclusively, in the oil globules. The substances which may be absorbed are gases, vapors, various impurities of the air, emanations from animal and vegetable substances, the germs of decaying organic matter and perhaps the infectious principles of contagious diseases, as of typhus fever and scarletina. It has long been a popular expedient to place vessels, filled with milk and uncovered in the larder, along with the meat of game to keep it fresh and sweet, and prevent putrefaction. Experience has shown that the flesh is preserved, while the milk acquires such offensive properties as to make it unfit for use. The milk in such instances absorbed the emanations from the meat as fast as formed, thus preserving the meat and injuring the milk.

Dr. Lawson Tait, of Birmingham, Eng., made some experiments in 1871 confirmatory of the popular notion as to the absorbing properties of milk. He placed milk under glass-bell jars along with certain substances containing gaseous or volatile principles, such as tar, turpentine, asafœtida, fæces, urine, etc., and found that the milk in a short time acquired the smell and taste of the substance with which it was placed in contact, and was thereby rendered unfit for use.

These experiments have been in a measure confirmed by the experience of our household. On several occasions, during the summer season especially, when green vegetables were placed in the refrigerator along with a vessel of milk, the latter frequently acquired an altered and unpalatable taste. As already stated, this remarkable absorbing property of milk, according to Dr. Tait, was found to exist chiefly in the cream that rose to the surface; the butter of the oil globules being the essential absorbing substance. Dr. T. is of the opinion that milk when carelessly exposed may absorb the poisonous effluvia of certain affections, and thus be the chief factor in the origin and spread of certain affections in an endemic form.

BRAITHWAITE, January, 1871.

It is well known to the manufacturer of condensed milk and cheese, that the milk of many cows can not be used in the manufacture of these articles. In some cases it is probable the milk acquires impurities or undergoes putrefactive changes during the process of milking or by useless handling after its removal from the cow, but I believe there can be no question as to the fact that the milk often acquires unhealthy properties while it is yet retained in the udder. Dr. Caldwell asserts that the germs or fungi thrown off from putrefying matter, mingling with the air, are inhaled by the cows and injuriously affect their milk.

In the London *Lancet*, December, 1873, Dr. J. W. Ogle publishes a communication on the subject of milk impurities and putrefactions, in which he gives some interesting statements on this subject from the pen of Dr. A. Williams, of New York, as published in the Royal Agricultural Reports of that year.

On this authority it is asserted that a Mr. Foster, of New York State, has demonstrated that cows that are continually subjected to the odors of putrefying animal remains furnish a milk unfit for the manufacture of cheese, and that when such milk is mixed with the milk of cows not subjected to such an impregnated atmosphere, it sets up such unhealthy action as to render the whole unfit for the purpose desired.

In such cases it is believed that the emanations from the animal decomposition entering the circulation of the cow through the lungs causes a change in the character of the milk, especially of the casein, before it leaves the body of the animal. In other cases the milk may be perfectly good when first drawn from the udder, but soon undergoes the putrefactive decomposition. Such milk is not only unfitted for the manufacture of cheese, but can not be used in the making of condensed milk. The cause of this early putrefaction has been discovered to have its origin in small particles of putrefying matter, which adhere to the teats and udder of the cow, and fall from thence into the milk during the act of milking. Animals kept in inclosures containing vegetable matter in a state of decomposition, and those that are compelled to cross sloughs, daily or frequently, are exceedingly apt to have portions of putrid substances adhering to their udders.

These putrid matters falling into the milk soon impart to it putridity.

Prof. Law, of Cornell University, has given us a striking instance of the impurity of milk and its cause. Observing that the cream furnished him was ropy and unhealthy looking, he placed a drop of it under the microscope. To his astonishment he found it filled with organisms (bacteria) foreign to good milk. He then visited the dairy, but could find nothing in the handling of the milk to account for this unlooked for phenomenon. Everything was clean and in order. In the field or inclosure, where the cows were kept, he discovered a pool of stagnant water, where the animals were compelled to slack their thirst. The microscope revealed, in a drop of water taken from this pool, innumerable organisms identical with those found in the cream. A drop of this water was then added to a quantity of pure untainted milk, when soon the milk swarmed with the same organic structures. The cows were next examined, and they were found by the thermometer to be hot and feverish, showing an unhealthy condition induced by the passage of these organisms through the system. It is probable that the bacteria may have been in the milk while it yet remained in the milk vessels. It is unfortunate that the Professor did not examine microscopically the milk as it came from the cow, as he might then have demonstrated whether it was affected before its removal from the cow. The consumption of certain weeds by cattle is well known to exert an injurious influence on the milk. Bitterness of the milk, occasioned by the eating of the herb known as rag-weed, is an apt illustration of this statement. Both the milk and the butter made from it are unfit for use.

A disease known as milk sickness, which prevails occasionally in some of our Western States, is popularly believed to be caused by the consumption of milk, which has become poisoned by certain vegetables consumed by cows. This opinion is espoused by many of the profession, and may be correct, but a committee of medical gentlemen appointed to examine this question was unable to give a decided opinion on the subject.

Many instances are on record where outbreaks of typhoid fever, in the endemic form, were traced to the use of milk coming from a certain dairy. Dr. Ballard gives an account of such an outbreak which occurred in Isling-

ton, Eng., in 1870. The majority of families in which the disease prevailed were found to take milk from the same company. He makes a very plausible argument in favor of the milk being the cause of the origin and spread of the affection.

Dr. Murchison published a similar statement as regards the occurrence of typhoid fever in one of the districts of London. He professed to have traced it to the consumption of milk obtained from a certain dairy. Investigation proved good management in the handling of milk, and also in the feeding and watering of the cows. But a sluggish stream of water passed near by which was thought to contain impure water, in which the milker sometimes rinsed his milk-pail previous to straining the milk. From this little circumstance, Dr. M. concluded that the milk derived germs of typhoid fever from this water, and that these rapidly multiplying in the milk rendered it infectious. From these observations, it will be seen that while milk is so useful to mankind it sometimes is the medium by which sickness and death may enter the family circle.

Having written at some length on milk as regards some of its most unpleasant aspects, I now propose to say something on the other side; something to cheer the human mind with the belief that we have such a substance as cow's milk; a liquid that has saved the lives of millions of our race.

Milk is a nutrient—it contains all the ingredients necessary to the maintenance of perfect health. Whether in infancy or old age it supports life, gives nutrition to the various organs and tissues and maintains the normal temperature.

Prof. Black, of scientific fame, was a firm believer that milk was the most suitable food for man in his declining years. He used it himself for many years previous to his death, and when he died, he sank to rest with a bowl of the precious liquid in his hand.

The writer now desires to say a few words in regard to the use of milk as a prophylatic of scarletina. It has often been observed that infants at the breast seldom have an attack of scarletina, no matter how much they may be exposed to the infection. From my own observations, I am persuaded that this immunity arises not so much from the age of the child as from the constant

use of milk. From data which I obtained some years ago and presented in a short paper to the Allegheny County Medical Society, but to which I can not now refer except in general terms, it appears that infants confined exclusively to the mother's breast generally escaped the disease; but those fed on a mixed diet, of which mother's milk was a part—no matter how young they were—took the affection as readily as children of more advanced age. Infants fed partly on cow's milk and partly on the amylacea and other food, derive no protection from their tender age. The conclusion I arrived at was, that the mother's milk as an exclusive diet was a prophylactic against scarlet fever, and that when exposure of the infant to this disease was imminent, the best protection that could be afforded him would be to confine him exclusively to the breast. I made some experiments on the use of cow's milk as a protective remedy in older children; but from the difficulties and uncertainties attending them, I can draw no certain conclusions on the subject. Milk, either in its pure state or skimmed, has long been employed as a therapeutic agent in many affections. Hypocrates, Celsus, Galen and many other medical authorities of antiquity appear to have used it with success as a therapeutic agent in phthisis, chronic affections of the joints and other prolonged diseases requiring active nutrition.

It is said by Dr. Doukin that Pliny asserts that the ancient Arcadians employed milk alone as a remedy for diseases appearing in the springtime. At this period of the year it was presumed that cows, coming from spring pastures, furnished a milk loaded with the odors and medicinal virtues of the many plants they consumed. Even in the latter part of the fifteenth century we find this view entertained and practically enforced in Italy. Many of the cities of Italy set apart portions of land, where certain herbs and plants were cultivated, for the express purpose of feeding such cows that give milk for the use of invalids. The milk was presumed to be medicated by such pasturage.

According to Dr. Fawaes, of India, it appears that pure milk has been employed as a remedial agent by the native practitioners of that country for ages. From thence the milk treatment for diseases was introduced into Europe by a Dr. Philip Kabell, a Russian physician, as late

as the year 1866. This eminent practitioner of medicine published that year a lengthy paper in the Edinburgh *Medical Journal* on the "Skim Milk Treatment," in the cure of diseases in which he professes to have treated successfully 200 cases. From the wonderful success attending his efforts, he is at a loss to know whether the curative influence of the milk depends upon its nutritive property alone, or whether, in conjunction with this property, it possesses curative principles, having a different mode of action. It seems to be merely a regulator of nutrition.

The diseases Dr. K. treated successfully by this mode of practice are numerous and varied. In the different forms of dropsy, no matter what organ or what kind of lesion, except it be malignant or incurable, may cause or accompany the effusion, this treatment is applicable. He professes to have cured asthma, when dependent on chronic bronchial catarrh and emphysema, hypertrophy and fatty degeneration of the liver, obstinate neuralgias, having their cause located in the intestinal organs, and many other diseases in which perverted nutrition was the primary source of the affection.

As to dropsies, he appears to have been peculiarly successful. Anasarca, ascites, hydrothorax, œdema, with or without chronic affections, not incurable, of the heart, liver or kidneys, yielded alike to this method of treatment. To succeed by the milk treatment, the milk must be pure and good, and should be given in most instances at regular intervals, and in such quantities as the stomach and intestines are able to digest. During the first week of the treatment, the milk should be given in from three to six ounces at a meal, and this amount repeated at intervals of four hours during the day, commencing at 8 o'clock A. M. On the second week, four pints in four equally divided doses should be given at the same intervals. After this, from five to six or even eight pints may be given daily in the same way. In the commencement of the treatment, a larger or smaller quantity may be given at a time as the digestive organs seem to bear. Milk completely deprived of its cream or skimmed is the kind used. It is better in preparing the "skim milk" that fresh milk be allowed to stand many hours—from twelve to twenty-four—in a cool place before removing the cream from the top; this being carefully done, the milk

is ready for use. Should diarrhea supervene on this treatment, the milk has either been given in too large quantities, or it contains too much cream. Smaller quantities must be given, or greater care must be taken in the removal of the cream, as the case may be. Constipation, with hard stools, indicates digestion of the milk, and points to an increase of the quantity of milk consumed. If constipation is troublesome in the commencement of the treatment, it may be relieved by enemas of warm water, or some gentle laxative, as castor oil.

Occurring at a late period with offensive evacuations, a little coffee added to the morning milk, and the use at dinner (4 o'clock P. M.) of a few stewed prunes, or a roasted apple, will generally correct it. Should the patient complain of much thirst, a little pure cold water or seltzer water may be allowed. In some cases the patient has an almost irresistible desire for solid food. Here Dr. K. allows a gruel made of oatmeal, combined with a portion of the milk, at 4 o'clock P. M., in the latter part of the second week or during the third. Beyond these exceptions, the patient takes nothing but pure skim milk for a period of five or six weeks. A slight improvement may then be made in the variety of food. Milk may now be administered but twice daily, and a weekly allowance of beef or mutton, raw or broiled, may be added to this dietery.

At a subsequent period, when the patient is greatly improved, a more solid and generous food is given. Besides the diseases already mentioned, in which the skim-milk diet has been found successful, Dr. Kabell suggests that it might prove useful in gastric ulcer, and in chronic, fatty degeneration of the arterial walls. Should it prove to be curative in this latter affection, apoplexies would find in it an excellent remedy.

American Journal of Medical Science, October, 1866.

On the publication of Dr. Kabell's paper, Dr. S. A. Donkin adopted this mode of treatment in many affections, and with marked success. He eventually tried it in that much dreaded and generally fatal affection, "diabetes mellitis," with success in proper cases; that is, where the disease had not been too prolonged. He published an account of two cases, in London *Lancet*, for January, 1880 (American Reprint), treated by the skim-

milk diet, with complete success in one case, and almost complete in the other. The cause of practical failure in the latter instance he attributed to the secret indulgence in the use of bread while the patient was under treatment. In both cases he gave the patients six pints skim milk daily, in divided doses, at such intervals as was recommended by Dr. K., for a period of two months, with amelioration in the symptoms. In one of the cases the patient was passing daily fifteen pints of urine, of a high specific gravity, containing an abundance of sugar. In two months the daily amount of urine voided was reduced to three and one-half pints, with a corresponding diminution in the specific gravity, and in the amount of sugar. One-half pound of beef or mutton, with a moderate allowance of cabbage and green vegetables, were added to his dinner, while the quantity of milk was reduced from six to five pints. No medicine but quinine and iron was given. The patient improved rapidly. Subsequently he employed this diet in two cases of chronic Bright's disease with highly encouraging results. In these cases the urine was scanty and richly albuminous, while dropsical effusions, as anasarca, ascites, and, in one case, hydrothorax, existed.

An exclusive skim-milk diet of 5 pints daily and a moderate allowance of brown bread was given. As medicine, 20 gr. of acetate of potassium with 20 drops of tinct. digitalis were given three times daily. Under this treatment the dropsical effusions speedily disappeared, and the urine was soon relieved of its albumen. A mixture of quinine and iron restored the patients to perfect health. After the patients had greatly improved, one-half pound of beef or mutton was added to the dinner meal.

Dr. Doukin's method of giving skim milk is very similar to that of Dr. Kabell's. He gives from 5 to 7 pints daily, and sometimes more, in divided doses, and at regular intervals, as long as the exigencies of the case require. He prefers giving it warm, and is especially careful to have the cream completely removed, particularly in cases of diabetes mellitis, lest during the nutritive process the butter should undergo a change. By his subsequent experience, Dr. D. was satisfied that it is better to begin the skim-milk treatment in smaller and more frequently repeated doses than he first employed. On

the first day he now gives half a teacupful every two or three hours; on the second day, double the quantity in the same intervals; on the third day, three pints, in divided doses of one-half pint every three or four hours; whilst on the fifth and sixth days, 5 pints; on the seventh day, 6 or 7 pints, in four equally divided doses, given at intervals of four hours during the day, commencing at 8 o'clock A. M.

In the treatment of both Bright's disease and diabetes, the skim milk, as an exclusive diet, must be employed until the albumen in the one case and the glucose in the other entirely disappears from the urine.

The form of Bright's disease in which he found it most useful, is the enlarged and fatty kidney. When the kidneys contract from long continued disease, temporary relief only is obtained. In the further management of diabetes, great care must be taken to prevent the patient from having any substances containing starch or cane sugar, until he is perfectly restored, and even then it is doubtful if he can use them any length of time with safety. After the milk diet has been used for five, six or eight weeks, or until the glucose has entirely disappeared from the urine, curds made from 2 or 3 pints of milk, by adding to it essence of rennet, may be taken at the dinner meal. Three or four weeks afterward, when the urine has become normal in quantity and quality, and when the strength and health of the patient have greatly improved, one-half pound of beef or mutton, with a small portion of cabbage, lettuce, brussel sprouts, greens or spinach, may be given at dinner along with the milk. Weeks or months subsequent, fish with bread—made of 80 per cent. of gluten, and 10 per cent. of bran, from which the starch has been carefully excluded—may also be taken at the dinner table. This treatment, persevered in, will cure diabetes mellitis in its early stages, and is far preferable to the meat and gluten treatment now so much in vogue. Dr. Belfour has also used the skim-milk treatment with success in several cases of asthma, which had resisted all other plans of cure. One case of diabetes mellitis treated by him in a short time received great benefit. At first, he mixed solid food with 2 or 3 pints of skim milk daily, and, as the case proceeds, gradually withdraws the solid matters, and increases the milk to 5

or 8 pints. The milk is then given in divided quantities, and at intervals similar to the methods of Drs. Kabell and Doukin.

BRAITHWAITE RETROSPECT, July, 1870.
From Editor of Medical Journal.

Dr. Gardner vigorously insists on the value of milk in the treatment of continued fevers. He has given it with success in such cases during the last fifteen years, and now employs it to the exclusion of wines and brandies.

AMERICAN JOURNAL MEDICAL SCIENCE, Oct., 1865.
From Lancet.

Recently it has been tried in chronic constipation by Dr. W. F. Trevan, of England. The case was a marked one, following the operation of lithotomy. The patient commenced the milk treatment seven years after the operation; much of this time he suffered from all the symptoms of cystitis, purulent urine, and from the use of the catheter. In sixteen days' treatment by the method of Dr. Geo. Johnston—that is, by using pure or unskimmed milk—he was perfectly restored to health. He had no further use for the catheter.

LANCET, Feb., 1879. Am. Rep.

In hypertrophy of the heart, where the muscular fibers are so developed and strong as to cause tension in the arteries, notwithstanding the existence of valvular insufficiency, aortic obstruction or dilatation of those cavities, Dr. Pecholior, of Montpelier, Vt., found great benefit by the adoption of the skim-milk diet. Under its use the impulse and palpitations of the heart gradually diminished, and the congestive condition of the brain, face and lungs disappeared.

AM. JOUR. MED. SCI., July, 1867.

The milk treatment in various affections has found an able advocate in the person of Dr. Geo. Johnston, of Kings College, London. The gentleman has treated many cases of chronic dysentery, typhoid fever, Bright's disease of the kidney, and chronic andsubacute inflammation of the bladder, with good results. Dr. Johnston uses the pure milk, retaining the cream. In this he differs with most other advocates of the exclusive milk diet. He prefers retaining the cream, as this is the part of the milk in which its laxative properties reside. When the cream disagrees, as indicated by heartburn, headache or diar-

rhea, he recommends a portion of cream to be removed. He often orders a gallon of pure milk to be taken in twenty-four hours, but never more than a pint at a time. In chronic affections of the bladder, after operations for calculus, he considers the treatment particularly efficacious. Dr. Johnston does not pay much regard to regularity in the administration of milk.

It would appear, from the experience of many distinguished physicians who employ the milk treatment in the cure of diseases, that benefit may be derived from the use of both skimmed and unskimmed milk. But since cream frequently disagrees, and at other times proves injurious, as in the fatty degenerations, especially of the kidneys, preference in the vast majority of cases should be given to the skimmed milk, which seldom disagrees with the bowels and stomach. It should be borne in mind that from 6 to 7 pints of milk are amply sufficient to sustain life, in the vast majority of instances, for a prolonged period, during which the patient acquires strength and flesh; but in some cases, where the subject is very large and has a voracious appetite, 8 or 10 pints may be required.

As a rule, one gallon of pure milk given daily, as recommended by Dr. J., is too much; headache and diarrhea must necessarily follow its employment. Experience teaches that the greatest benefit follows when the milk is given at stated times or methodically. Certain portions given four times daily, four hours apart, commencing at 8 o'clock A. M., and ending at 8 o'clock P. M., has certainly been proven to be the most judicious and successful method of employing the milk treatment. In several instances I have had occasion to use this treatment, and with marked success in Bright's disease and in chronic cystitis —*Pittsburg Medical Journal.*

St. Louis Medical Society.

DISCUSSION ON THE ADVISABILITY OF CATHARTICS IN OBSTRUCTIONS OF THE BOWELS.

Dr. Johnston—Addressed the Society on the subject which had been discussed at the preceding meeting, as follows: Dr. Prewitt has announced to the Society that a

physician who would administer a purgative for constipation would be guilty of criminal practice. A most extraordinary doctrine! None but a homeopath, almost a transcendentalist, would enunciate such doctrines.

Why, four thousand years ago, when Hippocrates was practicing medicine in the Island of Cos, he gave a mild purgative in such cases, and if Dr. Prewitt had ever made use of such remedies for this complaint he would now practice the same treatment. On what does the constipation of the bowels depend? Is it not dependent to a certain extent upon a lack of nerve action? The ileo-cæcal valve, the ascending, transverse, descending colon and rectum are to some extent paralyzed when the great sympathetic nerve originating from the brain is deficient in action. Then if you wish to cure the consequent constipation, should you not attempt to stimulate the nervous system into action, and so bring about the peristaltic movement of the bowels? And yet the Doctor says, that such practice would be criminal. Now, if you give a purgative, this stimulation of the nervous system is exactly what you accomplish by it. For what is the nature of a purgative? Does it not increase the nerve power, does it not stimulate the brain and spinal marrow? And would it not in this way overcome this partial paralysis in them? Does not every writer tell you, in constipation of the bowels, the administration of purgatives is proper?

And now as regards intussusception. Dr. Prewitt asserts that he can distinguish between the nausea resulting from some irritation of the pneumo-gastric nerve or that accompanying intussusception; if he can do this, and by differential diagnosis be able to recognize a case of intussusception when he sees it, he would then be justified in abstaining from the use of a purgative.

He has also stated that he could diagnosis a case of twist of the bowel from intussusception. If intussusception goes on, inflammation sets up, plastic matter is thrown out and sloughing takes place. But to assert that before all this occurs, it is possible to diagnosis a case of intussusception is to make a most remarkable statement; and such a diagnosis would certainly require an amount of learning and acuteness of observation hitherto unheard of. In the ascending colon intussusception may be present for one or two weeks, without any of these symptoms occurring. In the transverse colon, if it occur, there will

be vomiting or purging. And if the ileo-cæcal valve has thrown out plastic matter, and there is a stricture with it, how is it possible to distinguish that from intussusception or from a twist of the bowels? And suppose the transverse colon is sometimes so distended with fæcal matter that it is five or six inches in diameter, how could you tell but that there was a tumor there?

Dr. A. Green—For peritonitis in itself, I am opposed to the use of cathartics, but if we have reason to think the cause of a partial or general peritonitis is impaction of fæcal matter in the colon, I think that cathartics may be advantageously employed. But injections should first be used and may be followed by cathartics. We should try by gentle means to empty the bowels, and entirely eliminate the impactions, because the continuance of the presence of this large mass of fæcal matter may bring on great peritoneal inflammation; and if there is already peritonitis it will be increased, and we know that, under certain circumstances, an ordinary peritonitis may become a septic one.

Dr. Prewitt—I hardly know how to reply to the extraordinary speech of my friend Dr. Johnston. I suspect he is the only person in the room who so completely misapprehended my meaning. He has been talking about a thing decidedly different from that to which I referred.

As you all know, the subject under discussion was obstruction of the bowels, in speaking of which, I referred to impaction of the bowels with fæcal matter, a very different thing from ordinary constipation. There is an error in using the terms impaction and constipation as synonymous. Impaction only occurs in a large bowel; there is no such thing as impaction of a small bowel, and it is preposterous to suppose such a thing. In a case of impaction where there are huge plugs of fæcal matter, the administration of a cathartic, sufficient to excite the bowel to act with such enormous force as would be required to expel the plug, would endanger rupture. It would be far more reasonable to get rid of the fæcal matter by irritating the lower bowel with injections, and I must adhere to this view in spite of the Doctor's experience. I do not think impaction ever terminates in peritonitis unless the bowels have been goaded by irritants. The contents of the bowel accumulate to a large extent and remain a long time without bringing on any

peritonitis whatever. When irritation does not occur, it is muco-enteritis rather than peritonitis which is set up; and I have frequently found even in cases of impaction that there is diarrhea, because there is an irritation of the mucous coating of the bowel.

It is not paralysis of the bowel that occurs, for there may be a watery diarrhea when the bowel is enormously distended with fæcal matter. Suppose that there be an obstruction of the lower bowel about the sigmoid flexture, and suppose that there is a mass of fæcal matter above the point of obstruction, how would it be possible to expel this mass by the use of purgatives? There is already an abundance of peristaltic action which the purgatives would dangerously augment without overcoming the stricture, and although no peritonitis might exist (for we know that bowels may be enormously distended for months without peritonitis arising), the use of purgatives would very likely induce it. The gentlemen may remember a *post-mortem* examination made at the St. Louis Hospital in which it was found that the colon had been enormously distended for months with fæcal matter, and yet there was no peritonitis. The Doctor contends that we can not make a distinction between the obstruction of the bowels and irritation when intussusception exists.

At the outset, it is true, we may not be able to determine this; but suppose we had a case of severe vomiting induced by the irritation of the small bowel in which there was accumulation of fæcal matter, would not the administration of purgatives aggravate the trouble? As I said, these large accumulations of fæcal matter do not take place in a small bowel, but sometimes obstructions from intussusception, from twist or any other mechanical source, may prevent the passage of material from above. But we know from clinical experience that obstruction of the bowel takes place in a very large proportion of cases near the ileo-cæcal junction, and it is then accompanied by the characteristic paroxysmal pains that mark the obstruction of the bowel. This does not occur in simple irritation. Then another fact, connected with the obstruction of the bowels, is that the portion above the fæcal obstruction becomes distended, and to such an extent that sometimes you can actually see the coils of intestines when you roll them about and trace their out-

lines. This does not occur in simple irritation of the bowels unless there is peritonitis inducing distension. And yet a patient may die of obstruction of the bowels and not have peritonitis. Hence, distension without peritonitis is a marked symptom of obstruction.

The basis of the diagnosis between obstruction and acute intussusception is, that in intussusception, in addition to the symptoms of obstructions, there are dysenteric symptoms, the constant desire to go to stool with the evacuation of nothing but bloody mucus. It is only in those cases of intussusception, in which there are no bloody stools, that we would be at a loss to determine whether it is intussusception or some acute form of obstruction. Even in such cases we can often make a proximate diagnosis, because the symptoms of obstruction proper are very marked; and because we have the history of the case to guide us. If a patient who never before had any trouble about the bowels, who has never suffered from hernia, is gradually taken with symptoms of obstructions—acute and frequent pain, etc.—in a majority of cases it will prove to be a twist of the bowel. If, on the other hand, we find an acute obstruction of the bowel has been preceded by peritonitis on former occasions, or acute inflammation, or both, the chances are that it is a case of adhesion from a band of plastic lymph, thrown out on some former occasion, and has resulted in this obstruction. Of course, in cases in which there is a history of hernia having given rise to trouble on former occasions, and which was reduced, we find symptoms of obstruction occurring with pain (perhaps at the outset) in the region of the abdominal ring, and we can very readily conclude that the case is due to that old hernia, and that some adhesive band, the result of inflammation, has given rise to the obstruction, and under this very theory Mr. Bryant has several times operated, dividing the band, and relieving his patient.

There may be internal hernia in the obturator foramen, and then one of the chief symptoms will be vomiting. All I mean to say is, that we can often arrive at an approximate differential diagnosis in these cases, and that our treatment should be based upon the result of this differential diagnosis, and I did not say that a man who would administer purgatives in this nineteenth century, for what he knew to be intussusception of the bowels, would

be guilty of criminal practice. But I hope no other member of the Society misunderstood me as Dr. Johnston did.

Dr. Newman has asked how nature relieves these intussusceptions. There is reason to believe that in some cases of intussusception where the bowel is not too closely strangulated, that it does become disengaged. It is also a fact, in cases even of close constriction of the bowels by intussusceptions, that, by gangrene and sloughing, the invaginated portion has been passed and the patient has recovered. Then it is true, that in cases of chronic intussusception where the patient is fed per rectum, the introduction of a bougie caused a sort of reverse action of the bowel which leads to recovery. But while these are cases of chronic obstruction, you can not hope to accomplish such favorable results in acute cases.

Dr. Ford—I would merely like to say that I think Dr. Prewitt's positions are very well taken in regard to this matter; for if we examine the recent literature on the subject, we will find that it is possible to make reliable diagnosis between volvulus, intussusception, obstruction, etc., and a case where the bowel has slipped beneath a band of lymph. In children, many of these cases may be excluded from the diagnosis; but in old people, we see obstructions of the small intestine, which occur by the superior portion of the small intestine passing into another portion which has undergone fatty degeneration. The passage of bloody discharges by children, is almost always significant of an intussusceptic condition. I think the diagnosis is not fairly made in a great many cases. With regard to the treatment, I may say that I have seen several cases myself, in two of which I do not know that anything could have been done. Of the two others which got well, one was that of an old man, the other of a man about thirty years of age. In the case of an old man there was, I think, obstruction of the small intestine, with invagination of the superior portion, and fatty degeneration. The second case was one of a strong, hearty fellow working on the levee, who, after exerting himself laboriously, was suddenly taken, in attempting to lift an enormous weight, with acute pain in the umbilicus, followed in a few weeks by marked obstruction. Both of the cases had been treated by calomel, with the usual constitutional effects. Both of these cases recovered.

In Dr. Newman's case, it seems to me the symptoms pointed to something quite different from obstruction of the bowel. It was the case of a young woman at the menstrual period, who had for a long time been subject to dysmenorrhœa. She was troubled with great pain in the pelvic region, and was obliged to go to bed. The pain grew worse, and became excruciating; there was syncope—almost collapse—vomiting, and finally peritonitis. These are the symptoms of what is called hæmatocele. I do not know whether anything further was learned in the diagnosis; whether the finger was introduced into the vagina, or whether any palpation of the pelvic organs was made through the rectum.

Dr. Newman—I do not think that it was a case of hæmatocele. We might conclude that at the catamenial period a certain amount of blood had passed through the uterus, and then into the tubes, causing obstruction. It may have occurred in the tubes, originally, which may have been ruptured. I think it is plain in this case that hæmatocele could not have occurred from any of these causes. But it is not my intention to discuss this now. Dr. Prewitt has admitted, I think, that in obstruction from fæcal accumulations there may be enteritis, or peritonitis. Now, sir, when we recollect that this enteritis is the result of impacted fæces, does it not suggest itself to the common sense of every person that the cause which gives rise to this condition should be removed? Now, there are a number of agents which will accomplish this: injections and purgations. And if the peristaltic action of the bowels is stopped from any cause, by reflex action or direct inflammation of the nervous ganglia controlling that function, I am inclined to think very favorably of the treatment suggested by my friend, Dr. Green, that we should get rid of the cause of peritonitis or enteritis, and if this cause is an accumulation of fæces, we might judiciously employ a purgative. I should, however, first use injections, as suggested by Dr. Green, in order to dissolve the scybalous matter as much as possible. But we should employ other injections than those ordinarily employed. Ox-gall is said to have a wonderful effect in dissolving these scybala. I have said that as far as my reading goes, intussusception of the bowels is a very rare thing in adult life, although quite frequent among children. It is stated by some of our authorities that in some of the hospitals

where *post-mortems* have been held, that one-fourth of the children who have died have had intussusception of the bowels, which may have existed for a long time without giving rise to trouble. And the conclusion to be drawn from that is, that a large proportion of these intussusceptions are relieved by the natural function of the bowels, by the normal peristaltic action. This is the reason why I asked Dr. Prewitt how nature relieved these cases. In discussing the question of intussusception, Dr. Prewitt seems to base his views upon the presumption that in intussusception there is necessarily obstruction of the bowels. This, I think, is a great error. There need not be what may be called an obstruction of the bowels; on the contrary, there is in almost *all* cases a passage through the bowels, and when this is the case, I can not see why, as Dr. Prewitt asserts so emphatically, there must be bloody discharges and a constant desire to defecate. There are a great many points connected with this matter that deserve a thorough discussion.

Progress in the Treatment of Stricture of the Urethra.

Some remarks were made on this subject by Sir H. Thompson, at the annual meeting of the British Medical Association, in Cambridge, August, 1880. As illustrations of this advance during the last thirty years in England, the Doctor mentioned five points:

1. A general recognition of the principle that a delicate and gentle manipulation of any instruments in the urethra is alone trustworthy or permissible, in the place of that which was formerly greatly prevalent, viz.: that urethral obstruction might often be overcome mainly by force.

2. The substitution of very pliable and taper instruments for silver and stiff gum-elastic instruments in much of the treatment, both in ordinary and in continuous dilatation.

3. A more general acceptance of the doctrine that, given time, patience and gentle handling, very few strictures should be met with which can not be fairly and successfully traversed by an instrument passed through them into the bladder. At the same time, an undoubted improvement is to be noted in the mode of

operating for those exceptional cases in which the surgeon fails to acccomplish that object.

4. A more general acceptance of the doctrine that dilatation of urethra, whether with or without incision, may be carried with advantage to a somewhat higher degree than had for some time previously been regarded as desirable.

5. The substitution of internal urethrotomy in some form for the application of caustics, and for external urethrotomy on a guide.

Each of the topics named is then considered somewhat in detail. In connection with the subject of the "caliber," or "diameter" of the urethra, or the amount of its dilatability, he refers to Dr. Oti's revival of the theory of "the large diameter of the urethra." He records his sense of the value of this point, but he adds that "it is a very easy thing to damage irreparably some individuals by overdistending the urethra." Thompson also opposes another doctrine which is associated with the proceeding, viz.: that stricture of the urethra is permanently cured by complete division of all the diseased tissues affecting the passage. In speaking of the many methods of performing internal urethrotomy, he says that the principles which govern a sound procedure are more essential points for the surgeon to discover and to teach than a consideration of small details. These principles he briefly states as follows: 1. The necessity for a physical examination before operating, to detect and estimate the narrowed portions of the urethra. This is best accomplished, in his opinion, by a series of metal bulbs on slender stems, taking care not to regard as charges of disease these points at which the urethra itself is naturally only slightly dilatable. These bulbous exploring sounds he invariably used, advocating them as essential to diagnosis, in his first work, twenty-six years ago. He prefers them to any others, as safer, less irritating, and not less efficient than more complex instruments which have been devised. 2. The necessity for accomplishing a complete division of all the morbid tissue constituting the stricture, by an incision carried through it, no matter what part of the urethra, or how much of it, is involved in the disease. As a general rule, he thinks, this is most efficiently done by a slender blade, carried beyond the stricture, and made to cut from within outward, this latter

proviso being, however, an open question. The important point is that any alleviation of the patient's condition, attained by operation, will be transitory if any part of the narrowing be left undivided. 3. He regards it as essential, after such division, to place at once a full-sized catheter for some hours in the bladder, to insure a free outlet for the urine, and prevent all possibility of extravasation of urine into and through the incisions thus made. 4. The necessity for passing full-sized bougies subsequently, at occasional intervals, in order to effect free distension of the walls of the urethra, which lie in almost constant apposition, and so prevent reunion of divided surfaces by the first intention. Finally, he declares the desideratum of the present time unquestionably is the discovery of a mode of treatment which shall permanently restore to the strictured passage its original dilatability; and he adds that a thoughtful consideration of the pathological condition which constitutes organic stricture does not embolden him to hope that such a result can be insured by the application of any principles of action at present known to us.—*British Medical Journal.*

Microscopy.

Dissolution of Copartnership.

We have received a circular to the following effect:

"The partnership heretofore existing between C. A. Spencer & Sons has been dissolved, and Herbert R. Spencer & Co. will hereafter devote themselves to the production of Microscopical Objectives, guaranteed to be one of the highest grade, and more than maintaining the reputation heretofore accorded the work of C. A. Spencer & Sons.

"For the past six years or more, all of the objectives manufactured and sent out by C. A. Spencer & Sons have been made entirely under the supervision of Herbert R. Spencer, after his own formulas, known only by himself, and it is scarcely necessary to say that our objectives will be of the same uniform and excellent grades as those heretofore sent out by the late firm.

"Causes, unnecessary for us to specify, have heretofore

prevented the prompt execution of orders, and as those causes no longer exist, and as it is our intention within a very short time to have always on hand the various grades of objectives named in our list, herewith appended, we can promise a prompt response to all orders, and we will guarantee all objectives marked H. R. Spencer & Co., but not those hereafter sent out simply marked 'Spencer,' or 'C. A. Spencer & Co.'"

Ancient Aids to Vision.

Cicero said that he had seen the entire Iliad, which is a poem as large as the New Testament, written on skin so that it could be rolled up in the compass of a nut-shell. Now, this is imperceptible to the ordinary eye. Very recently the whole contents of a London newspaper were photographed on a paper half as long as the hand. It was put under a dove's wing and sent into Paris, where they enlarged it and read the news. This copy of the Iliad must have been made by some such process. Pliny says that Nero, the tyrant, had a ring with a gem in it which he looked through and watched the sword-play of the gladiators, more clearly than with the naked eye. So Nero had an opera-glass. Mauritius, the Italian, stood on the promontory of his island and could sweep over the entire sea to the coast of Africa with his *nauscopite*, which is a word derived from two Greek words, meaning to see a ship. Evidently Mauritius, who was a pirate, had a marine telescope. The signet of a ring in Dr. Abbott's museum, said to belong to Cheops, who lived five hundred years before Christ, is about the size of a quarter of a dollar, and the engraving is invisible without the aid of glasses. In Parma is shown a gem once worn on the finger of Michael Angelo, of which the engraving is two thousand years old, in which there are the figures of seven women. A glass is needed to distinguish the forms at all. Layard says he would be unable to read the engravings on Nineveh without strong spectacles, they are so extremely small. Rawlinson brought home a stone about twenty inches long and ten wide, containing an entire treatise on mathematics. It would be perfectly illegible without glasses. Now, if we are unable to read it without the aid of glasses, you may suppose

that the man who engraved it had pretty strong spectacles. So, the microscope, instead of dating from our time, finds its brothers in the Books of Moses—and these are infant brothers.

AMERICAN MICROSCOPES IN ENGLAND.—At a meeting of the Royal Microscopical Society, held November 10th, Dr. Carpenter, the distinguished microscopist and physiologist, brought before the notice of the Society a microscope which he said he considered to be one of the most practical and efficient student's microscopes that he had ever seen. It was an instrument made by Mr. George Wale, of New York. "A microscope intended for medical students," he said," should, above all things, possess simplicity of design and workmanship; in other words, should be capable of being produced in large numbers at a moderate cost. It should be of substantial build, not easily getting out of order. The focusing movements should be well enough contrived to permit the occasional use of high powers, and the mirror should be so attached as to admit the largest range of oblique motion. These points have been attended to with success in Mr. Wale's stand." We have not space to give Dr. Carpenter's description, as it is quite lengthy, as published in the *English Mechanic and World of Science.* He concluded his remarks by warmly commending the stand to the notice of the English opticians, saying that he did not at all desire to see a mere copy of the stand produced in England, though he thought that might be done less expensively there than in America.

GLEANINGS.

BY CHAS. A. L. REED, M. D., HAMILTON, OHIO.

UTERINE HÆMOSTATICS.—At a recent meeting of the British Medical Association (*Brit. Med. Jour.*, vol. ii., 1880, p. 367), Dr. Lombe Atthill read a paper on this subject, confining his remarks to the means of arresting hemorrhages from the unimpregnated uterus. The commonest causes of these were: 1. The various forms of cancer. 2. Tumors of the uterus. 3. Imperfect involution of the

uterus after labor or abortion. 4. A granular condition of the intra-uterine surface. 5. Retention of a portion of the ovum after abortion. As to cancer, Dr. Atthill's opinion of the Chian turpentine treatment was favorable, although not to the extent of Mr. Clay's views as to its curative powers in malignant disease of the uterus. It seemed to exercise its greatest power in cases of epithelioma of the cervix, and to have comparatively little influence in the medullary form of the disease. The value of turpentine in cancer of the uterus seemed to be mainly due to its action in diminishing the blood-supply. The small supply of Chian turpentine, and the difficulty of obtaining it pure, were serious objections to its use. Dr. Atthill believed that a pure oil of turpentine, administered in from ten to twenty drop doses, three or four times a day, was, as a hæmostatic, quite as good, and that, if carefully rubbed up with powdered gum arabic or tragacanth, it was likely to agree with most patients.

To restrain the hemorrhage from fibrous tumors, the injection into the uterus of the liquor ferri perchloridi and of the tincture of iron had been advocated. This method was sometimes followed by satisfactory results; but it was not absolutely safe, and unless care was taken to provide a free exit for the fluid injected, either by previously dilating the cervix uteri or by using a double canula, serious results might follow. The injection of hot water in such cases was a far safer method of restraining the hemorrhage. Incising the cervix was often useful in being followed by a diminution in the hemorrhage and by relief from pain, and at the same time it permitted the introduction into the uterus of a tube of moderate size and the free return of the hot water, which should be injected at a temperature of about 110° F. Another simple and often effectual method of applying heat was the use of Chapman's spinal hot-water bags. Of drugs, none could equal ergot in its power of restraining the hemorrhage depending on fibrous tumors. It was most effective when administered hypodermically.

Imperfect evolution of the uterus implied primarily a relaxed state of the muscular tissue of the organ and an unduly distended condition of the uterine vessels, and, also, in most cases, an unhealthy condition of the intra-uterine mucous membrane. When the latter existed it must be cured by treatment directed to the intra-uterine

surface. To check the hemorrhage at the time of its occurrence hot water was a safe plan of treatment, and, generally, easily carried out. Ergot, quinine and strychnine were, in cases of imperfect involution of the uterus, indirect hæmostatics. In the chronic form of the affection, Dr. Atthill had administered Chian turpentine with benefit.

Hemorrhage due to a granular condition of the vaginal aspect of the cervix might be arrested by the direct application to the bleeding surface of almost any astringent; but to prevent its recurrence a healthy condition of the cervix must be brought about by the free application of some strong caustic.

The retention of a portion of the ovum after abortion sometimes gave rise to very troublesome hemorrhage. In such cases dilatation of the uterus and removal of the retained portion by a curette might be performed unless contra-indicated, but it was liable to give rise to cellulitis and even to peritonitis, and Dr. Atthill therefore strongly recommended, in such cases, at least as a preliminary measure, the syringing out of the uterus with hot water. He had no faith in the administration of astringents by the mouth in cases of uterine hemorrhage depending on the causes which he had enumerated. In conclusion, he suggested that the most important questions for discussion in connection with the subject of uterine hæmostatics were these: 1. What is the value of Chian turpentine in arresting hemorrhage in cases of cancer of the uterus? 2. Is Chian turpentine the only variety of the drug of use in such cases? 3. In what other forms of uterine hemorrhage is the administration of turpentine indicated? 4. What is the value of the intra-uterine injection of hot water; (*a*) in cases of hemorrhage depending on the existence of fibrous tumors of the uterus; (*b*) in cases of imperfect involution of the uterus; (*c*) where portions of the ovum have been retained after abortion?

Conjunctivitis from Chloral.—Dr. J. H. Emerson, at a recent meeting of the New York Clinical Society, mentioned a case of ophthalmia produced by the use of chloral hydrate. The patient, a young man, was subject to attacks of asthma, and in two severe attacks, chloral, in ten or fifteen grain doses, had afforded great relief. This led him, during a recent attack, to employ it each

night for some time. Shortly after he began its use the conjunctiva of the globe and lids became injected, and photophobia existed, with profuse lachrymation. The latter, as it occurred in the left eye, did not correspond with the degree of photophobia. The affection of the eyes required him to keep his bed. Iodide of potassium, which he had been taking, had been discontinued for some time, and the resulting ache and throat irritation had disappeared. There seemed to be no cause therefore, other than the use of chloral, for the ophthalmic trouble. The treatment first adopted was the application of camphor water and borax, then of sulphate of zinc and rose water, but no improvement resulted. The chloral was then discontinued, and immediate improvement took place.

NOTE ON A SIGN BUT SLIGHTLY KNOWN, YET PATHOGNOMONIC OF FRACTURE OF THE NECK OF THE FEMUR.—In the principal hospital of Milan it is the traditional practice to explore attentively the little space which is found between the great trochanter and the ilium, whenever attention is drawn to the possibility of a fracture of the neck of the femur by some rational sign.

When the lower limbs have been brought parallel to the median line, in place of the considerable resistance which the tensor muscles of the fascia lata and middle gluteus present on the healthy side, we find on the fractured side a very appreciable depression, due to the approach of the points of insertion of the above-named muscles.

We do not know the surgeon who first remarked this symptom. Professor Bessi, of Modena, in his *Surgical Clinic*, in indicating this phenomenon to his pupils, said that he had it from Dr. Gherini, former surgeon of the principal hospital of Milan.—*Imparziale di Firenze—L'Union Med.*

TREATMENT OF BURNS.—Dr. Shrady, of New York, has recently treated burns by applying a paste composed of three ounces of gum acacia, one ounce of gum tragacanth, one pint of carbolized water (1 to 60), and two ounces of molasses. It is applied with a brush, renewed at intervals, and is stated to be a successful method. Four applications are usually sufficient, the granulating surfaces

being treated with simple cerate or the oxide of zinc ointment, as indicated.—*London Lancet.*

Treatment of Prolapsus Ani in Children.—Dr. Basevi (*Giornale Internazionalle delle Scienze Mediche*, Fasc. 9) employs the following treatment in chronic cases of this affection. He first cauterizes lightly the protruding portion with nitrate of silver and then reduces it, administering afterward, with the view of checking any tendency to enteritis, an enema of tannic acid, alum and ice-cold water. Should this treatment prove insufficient, the child is placed on a bed with the nates upward, and steadied by two assistants, one of whom fixes the upper part of the body, while the other holds the knees elevated and somewhat abducted. The prolapses having been reduced, the nates are brought together, and two strips of diachylon plaster, each about two inches wide, are passed from one trochanter to the other in as close proximity as possible to the perineum. To keep them in place, a spica bandage is applied around the lower portion of the body, and a piece of gutta percha is added to protect the plaster from the contact of fæcal matter. The apparatus may be left in position for two weeks.—*London Medical Record.*

The Best Position for Women in Labor.—An exhaustive paper on this subject, by Dr. George J. Engelmann, of St. Louis, is reported in the proceedings of the American Gynecological Association. Among other historical facts, the doctor tells us that "only in Siam are women kept in the recumbent position, flat on the back, the rarest of all positions during labor." The author concludes "that the fully recumbent position on the back is inimical to safe and rapid labor." He believes we should advise that, in the early stages of labor, the woman should be permitted to follow her own instinct with reference to position, and even in the last stages of labor she might be allowed to do the same, except perhaps with reference to some general directions, and for these he would say the semi-recumbent position in bed was the one best adapted to give her the greatest assistance.—*American Journal of Obstetrics.*

Book Notices.

A Practical Treatise on the Diseases of Women. By T. Gaillard Thomas, M. D., Professor of Diseases of Women in the College of Physicians and Surgeons, etc. Fifth Edition. Enlarged and thoroughly revised. Containing 266 engravings on wood. 8vo. Pp. 806. Philadelphia: H. C. Lea's Son & Co. Cincinnati: R. Clarke & Co. Price, $6.50.

This work has met with a success which must certainly be very flattering to its author. In 1868 the first edition was published. In only twelve years from that time a fifth edition is called for. Besides this evidence of appreciation, it has been honored by a translation into German, French, Italian and Spanish. Surely the author has reason to feel flattered.

But we feel sure an examination of the work will satisfy that it is one of great merit. It is not a mere compilation from other works, but it is the fruit of the ripe thoughts, sound judgment and critical observations of a learned, scientific man. It is a treasury of knowledge of the department of medicine to which it is devoted. And so interestingly are the gems of fact presented that the reader's attention is attracted at once and he peruses the pages with an interest seldom experienced in reading a medical work.

The author has devoted two years of labor upon this edition. It will, therefore, be found that every chapter has received a thorough revision, bringing its contents up to the present state of knowledge. In its present revised state it certainly holds a foremost position as a gynecological work, and will continue to be regarded as a standard authority.

The publishers have bound this work in half Russia binding, and also Hamilton's "Fractures and Dislocations." This is much more elegant than sheep, besides being more substantial. The cost is but a trifle more than sheep; and physicians will readily pay the difference for the increased beautiful appearance of the book. Messrs. H. C. Lea's Son & Co. design binding other of their many publications with the same binding. Each volume is wrapped in soft paper, and inclosed in a box.

A Practical Treatise on Fractures and Dislocations. By Frank Hastings Hamilton, A. M., M. D., LL. D., Surgeon to Bellevue Hospital, New York, etc., etc. Sixth American Edition. Revised and Improved. Illustrated with 352 woodcuts. 8vo. Pp. 909. Philadelphia: Henry C. Lea's Son & Co. Half Russia. Price $7.00.

It is now twenty years since the first edition of this work has been published, and, as has been stated, there has scarcely been any attempt, either in this country or in Europe, to furnish a similar one, so that it may be said to occupy the field alone. It is somewhat surprising, too, that, in the department of surgery to which it is devoted, it should be the only monograph. But the study of fractures and dislocations, although of the highest importance, is most difficult, and is of too practical a character to be inviting. There is no room in it for brilliant hypothesis—all are facts which can be tested; and the disproval of the correctness of a result of some beautiful process of reasoning may be manifested by a deformity or uselessness forever of a limb. Persons generally prefer to write upon those subjects in regard to which the fallacies of their discussions can not be made so apparent.

The experience of such a surgeon as Prof. Hamilton has been very great indeed. But few have enjoyed the opportunities of observation as he. In addition to his own experience and observation, he has been a most thorough student of the labors of others, searching through medical journals, works on surgery, papers read before societies, discussions, etc., treasuring up in his mind whatever he found of value. Thus qualified in this department of surgery, by an extensive learning, rarely equaled, he has written the work before us. That it should, under such circumstances, be *par excellence* a source of information in regard to fractures and dislocations, in advance of all others, is claiming for it no more than what is justly its due. These accidents are here treated more elaborately, scientifically and practically than anywhere else.

But in noticing previous editions of the work, we have very fully described it. It will, therefore, only be necessary for us to mention the fact that in this, the sixth edition, most of the chapters have undergone a thorough revision. A chapter on "General Diagnosis" has been added,

and several new illustrations introduced. The work is now as complete as it well can be with our present knowledge.

A Treatise on Diphtheria. By A. Jacobi, M. D., Clinical Professor of Diseases of Children in the College of Physicians and Surgeons, New York, Physician to Bellevue, etc. 8vo. Pp. 252. New York: William Wood & Co.

Prof. Jacobi has long been known as one of the most distinguished physicians of New York City. Besides his public practice in different institutions, he has an exceedingly large private practice, so that his advantages for observation and experience have, for many years, been unsurpassed.

So generally known is Prof. Jacobi as a most skillful and learned physician, we have no doubt this work will be eagerly sought for by the profession generally. There is no disease at the present time that commits so great ravages as diphtheria. In many epidemics an attack of it has seemed to be almost necessarily fatal, so virulent has been its onset—destroying the vital powers at the very start. Under the circumstances, therefore, physicians will seize upon any prospect to increase their knowledge of this most fell disease, before which not unfrequently they have to confess themselves altogether powerless. This work, consequently, coming from so eminent a source, will, undoubtedly, meet with a ready sale.

The work contains nine chapters, in which are described the history of diphtheria, its etiology, the manner of infection, contagion and incubation, symptoms, anatomical appearances, diagnosis, prognosis and treatment. In these chapters will be found much valuable information; and if an antidote is not presented to the physician who reads it, he will certainly have his knowledge enlarged, and be able to treat the affection more in accordance with its history, etiology, pathology, etc., and probably secure better results than he had been having previously. In addition, he will be better informed how to protect those who have not yet been attacked during an epidemic, from contracting it.

THE DESCRIPTIVE ATLAS OF ANATOMY. A Representation of the Anatomy of the Human Body. In 92 Royal 4to. Plates. Containing 550 Figures. Philadelphia: J. B. Lippincott & Co. Cincinnati: R. Clarke & Co. Price, $5.00.

This will be found a most valuable work, and will undoubtedly be sought by all physicians having students in their offices. In fact, having now an existence, it occurs to us that it will be regarded an essential to all who are engaged in instructing in anatomy, especially to those residing in the country, where there are no facilities for dissecting. But even when the facilities for studying practical anatomy exist, pictures and plates have to be used to considerable extent as supplemental.

The pages of the work before us are quarto size, or that of a large atlas, the paper being of the heaviest character. Commencing with the bones composing the skull, every anatomical structure of the human body is exhibited in the 550 figures. The parts are described *in situ*, and the *arteries and veins have been colored.*

The arrangement is as follows: The bones and ligaments have together been placed first; then follow muscles, fasciæ, organs of special sense, dissected regions and the viscera; next are placed the arteries, veins and lymphatics; and lastly the nervous system—an arrangement which will be found practically useful to the student.

A work of this size, having all the structures colored, would probably cost from $50 to $100. Although in this work they are not colored, except the arteries and veins, yet as every part is clearly exhibited, and very correctly so, we can not see that the work is any the less valuable. At the low price of $5 it is certainly as cheap a work as ever issued from the press, not even excepting works for popular circulation.

MEDICAL HERESIES: HISTORICALLY CONSIDERED. A Series of Critical Essays on the Origin and Evolution of Sectarian Medicine, Embracing a Special Sketch and Review of Homeopathy, Past and Present. By Ganzalvo C. Smythe, A. M., M. D., Professor of Practice of Medicine in Central College of Physicians and Surgeons, Indianapolis, Ind. 12mo. Pp. 228. Philadel-

phia: Presley Blakiston. Cincinnati: R. Clarke & Co. Price, $1.25.

This work will be found exceedingly interesting, containing, as it does, a great deal of information in regard to medicine. It is, in fact, a history of medicine from the earliest period to the present time, giving an account of all the various schools of medicine, the doctrines held by them and modes of treating diseases. In illustration we give the contents of the first chapter: "Ages in Medicine: The Mythological, Dogmatic, or Empirical, and Rational; Origin of Medicine; Its Evolution; Primeval Medicine; Ancient Egyptian Civilization; Influence of Epidemics upon Primeval Man."

In discussing homeopathy the work shows conclusively that even in these modern times the "fool-killer" is about. This system of medicine (?) is dealt with without any feeling—its dogmas being exhibited from the writings of Hahnemann, and more recent homeopathic writers, without any exaggeration. If the expose could be brought before the public, we feel very sure that homeopathy would soon die out. As it is, the people are not aware of the miserable absurdities contained in it, and consequently continue their patronage. Our author shows the efforts of many homeopathic physicians to reform it and get rid of many of its doctrines that are shocking to common sense.

We are sure the work will meet with a ready sale, as intelligent physicians generally are interested in the history of the evolution of their profession.

How a Person Threatened or Afflicted with Bright's Disease Ought to Live. By Joseph F. Edwards, M.D. 16mo. Pp. 87. Philadelphia: Presley Blakiston. Cincinnati: R. Clarke & Co. Price, 75 cents.

This little work is written in plain, non-technical language for the use of non-professional readers. Among other reasons which the author gives for publishing the work, he states that one is the fact that, in many instances, a person with a well marked case of Bright's disease can, by leading a proper life, live in comfort and comparatively good health for many years; that very few diseases are so liable to be aggravated by neglect of hygienic rules. He hopes, therefore, by promulgating some

knowledge in regard to the kidneys—what their offices are—with some information in regard to the functions of other organs and a few leading principles pertaining to diet, he may contribute to restoring some to health and be the means of prolonging the lives of others.

Physicians, as well as laymen, will find the work interesting, and will obtain many valuable hints as to the proper hygiene to be observed in Bright's disease.

THE MEDICAL RECORD, VISITING LIST, OR PHYSICIANS' DIARY FOR 1881. New York: Wm. Wood & Co.

This is the handsomest visiting-list it has ever been our pleasure to see. It is bound in elegant red morocco, with gilt edges. It has lines for thirty patients a week, with space on opposite page for the cash charge for the week, page of ledger and general memoranda. There are also pages for obstetric record, addresses of patients and others, cash account, etc. As is desirable, it is not burthened with much reading matter. There are some tables relating to pregnancy, doses of drugs used by subcutaneous injection and *per orem*, poisons and antidotes, etc. It is a very handsome and convenient visiting list for the pocket.

WALSH'S PHYSICIANS' COMBINED CALL-BOOK AND TABLET FROM 18— TO 18—. Fourth Edition. Published by Ralph Walsh, M. D., Washington.

WALSH'S PHYSICIANS' HANDY LEDGER. A Companion to Walsh's Physicians' Combined Call-Book and Tablet. Published by Ralph Walsh, Washington.

The first of these two works is designed for a visiting-list, similar to others of the kind, to be carried in the pocket in order to keep memoranda of visits made patients. The page in front of each weekly page of visits is blank, for the purpose of any memoranda desired to be made. This is an advantage peculiar to this work. Besides these are appropriate pages for obstetrical records, cash accounts, vaccination engagements, etc. The use of this visiting-list can commence at any time in the year, and lasts a year.

The second work is one of 600 pages as a ledger. It is exceedingly convenient, as a patient's account can be ascertained at any time at a glance. For every sort of

attendance, and for cash payments at any time, each family, with whom an account is opened, requires but two pages during the course of a year. It will accommodate 300 names. With it, not more than twenty minutes will be necessary each day to foot up the largest practice. For ordinary visits one line lasts a month. We very cordially recommend it to our friends. Price, $3.00.

OTHER BOOK NOTICES.—We are in receipt of a number of other new books which want of space makes it impossible to notice in this number. We will give them attention in our next.

EDITORAL..

PARTIES who advertise will consult their interests by advertising in a well-established journal—not one just commenced, nor one that has lived out its day of usefulness and is kept alive by occasionally buying up the subscription list of a defunct contemporary. It is better to pay a reasonable sum for space in a journal of large *bna fide* circulation than a very small sum in a journal of scarcely any circulation.

THE MEDICAL NEWS is the cheapest medical journal to advertise in of any medical journal in the West—not because it charges less per page, but because it has the largest circulation. Those who advertise in it usually continue their advertisements so long as they continue to advertise in any journal. In looking over the advertising form it will be observed that not a few of the advertisements have been appearing for years.

We hereby append the post-office law in regard to periodical publications. By noticing it, and keeping it in mind, hard feelings would sometimes be avoided:

UNITED STATES POSTAL LAW.—1. A postmaster is required to give notice *by letter* (returning a paper does not answer the law) when a subscriber does not take his paper out of the office, and state the reasons for its not being taken. Any neglect to do so makes the postmaster *responsible* to the publishers for payment.

2. Any person who takes a paper from the post-office, whether directed to his name or another, or whether he has subscribed or not, is responsible for the pay.

3. If a person orders his paper discontinued, he must pay all arrearages, or the publisher may continue to send it until the payment is made, and collect the whole amount, *whether it be taken from the office or not.* There can be no legal discontinuance until the payment is made.

4. If the subscriber orders his paper to be stopped at a certain time, and the publisher continues to send, the subscriber is bound to pay for it *if he takes it out of the post-office.* The law proceeds upon the fact that a man must pay for what he uses.

5. The courts have decided that refusing to take a newspaper and periodicals from the post-office, or removing and leaving them uncalled for, is *prima facie* evidence of intentional fraud.

EARLY PRACTICE OF MEDICINE BY WOMEN.—As every one does not read the *Popular Science Monthly*, we have thought that we would cull from the December issue a few facts in regard to women practicing medicine, in an

article on the subject by Prof. H. Carrington Bolton, Ph. D. It is stated that isolated cases of gifted women attaining notable surgical skill and successfully pursuing the divine art of healing, are recorded at various epochs in the history of the intellectual development of woman, but that they occur at long intervals of time, and in widely scattered chronicles. In ancient Egypt, the crafty guardians of superstition sedulously concealed their superior knowledge from an ignorant people, but that there were at least some women who practiced gynecology at that time is manifest from the story of the birth of Moses. Among the ancient Greeks, medicine held a high position, and, to add to its dignity, the practice of it was forbidden to women and slaves. During the middle ages of the Christian era, medicine, as well as every other branch of science, was loaded with superstition. We, therefore, find both men and women exercising the double calling of sorcerers and healers of the sick.

The first female practitioner, who received a medical education, appears to be Agnodice, a young Athenian woman, who lived about 300 years B. C. Schools of medicine were forbidden to her sex, but she obtained advantage of them by disguising herself in male attire. After completing her education, she practiced with great success, devoting herself mostly to diseases of her own sex. Becoming jealous of her great reputation, the Athenian physicians accused her of abusing her trusts in dealing with female patients. To establish her innocence she disclosed her sex, when they charged her of violating the law forbidding females and slaves practicing medicine. But her female patients came to her rescue, and got her acquitted.

Notwithstanding the ancient Romans and Greeks were opposed to women having anything to do with medicine, yet several of their women obtained considerable distinction as physicians, as Phænarete, the mother of Socrates, Olympia of Thebes, Salpe, Sotira, Elephantis, Favilla, Aspasia and Cleopatra. Fabiola was the Nightingale of antiquity. She flourished in the fourth century, and was of the illustrious house of Fabius. She founded hospitals in Italy, and personally nursed the sick, as at Ostia.

During the middle ages, Dr. Bolton, in his article, says that not a few nuns and other women were engaged in

practicing the healing art and nursing the sick. The remedies of many of these were of a superstitious character, attended with prayers and enchantments. We have mentioned in previous editorials in the NEWS the effect of mental impressions, under some circumstances, upon the body. No doubt benefit oftentimes resulted in this way from such remedies, although not calculated in themselves to do any good.

The universities of Italy first recognized the capabilities of women in medicine, and, although this recognition occurred as far back as the twelfth century or earlier, yet they are still in advance of the medical schools of our country, who close their doors against them, and along with them are those of Cincinnati, which have frequently turned them away. In the thirteenth century two women, most remarkable for learning, lived. We mention them although they were not devoted to medicine. The abilities, however, that they exhibited, show, that, if they had given their attention to it, they could have held the highest positions as physicians. We refer to Accorsa Accorso and Bettisia Gozzadini. Both of these women held professorships in the University of Bologna. The first the chair of philosophy, the latter that of jurisprudence. June 5, 1646, Elena Lucrezia Cornaro was born at Venice. Besides her native Italian, she was familiar with French, Spanish, Latin, Greek and Hebrew, and had some acquaintance with Arabic. The degree of Doctor of Philosophy was conferred upon her by the University of Cornaro. She discoursed eloquently upon philosophy, mathematics, astronomy and theology. She attained a European reputation, and died at the early age of thirty-eight. We could mention a number of other learned women who lived in the fourteenth, fifteenth, sixteenth and seventeenth centuries, but we are more particularly interested in those who were famous for their medical knowledge. Anna Morandi was born about the year 1715. She attained to the highest distinction as an anatomist, making many discoveries. So great was her skill in dissections requiring delicacy of touch and minuteness of detail that her reputation extended throughout Europe, and her lecture-room was frequented by students of all countries. Her talent was first developed by assisting her husband, a poor, hard-working maker of anatomical models in wax. Soon after commencing to assist

him, she surpassed her husband in skill. Although receiving tempting offers from other Italian universities, and even from England and Russia, she preferred filling the chair of anatomy in the Bologna Institute, to which she had been appointed soon after her husband's death in 1755. She enjoys the distinction of having been the first "to reproduce, in wax, such minute portions of the body as the capillary vessels and the nerves." A number of other women have flourished in Italy distinguished for medical knowledge, and their learning in other departments of science, but we have not the space to mention them. In Spain, the universities of Cordova, Salamanca and Alcala honored many women with doctor's degrees. In Madrid, in 1587, a learned medical work appeared, published over the name of Olivia del Sabuco. In Germany, Frau Erxleben was one of the most successful female practitioners of the last century. In England, in the seventeenth century, Anna Wolley and Elizabeth Kent published works on medical subjects.

Every physician of intelligence has heard of the eminent Madame La Chapelle and Madame Boivin, both of France. The latter of the two, at least, was honored with the degree of Doctor of Medicine by the University of Marburg. Dewees, in his "System of Midwifery," referred to them as of the highest authority, and frequently quoted them in discussing unsettled subjects.

We could occupy many pages of the NEWS in relating the success of the efforts of many women in the practice of medicine. It has been proven that there are many women capable of attaining to the highest degree of eminence in learning and skill in medicine. But while this is true, yet we do not believe that they will ever, to any very great extent, displace men as practitioners, not even in the diseases of their sex and those of children, which they are more especially adapted to treat. The discharge of their duties as wives will be an insurmountable obstacle, not to their acquiring knowledge, but to their putting it to practical use. They can not, therefore, in the nature of things, become physicians, lawyers, judges, preachers, professors, etc. Dr. Bolton, to whose article in the *Science Monthly*, we are indebted for the greater part of the facts we have presented, seems to consider ladies as peculiarly adapted for practicing medicine. We think so, too, but, at the same time, we regard

them as better adapted for wives, and, consequently, that, as a general thing, will be their calling.

Decease of Dr. Thomas Wood.—It gives us much pain, indeed, to announce the decease of Dr. Thomas Wood, which took place Sunday, November 21. As but comparatively few knew of his being ill, the announcement in the papers of his death was quite a shock to his numerous friends of the profession and the community. He died in the harness—with his armor on—by a blow from the enemy he had devoted his life in contending against. He had been attending some persons who had been injured by a railroad accident. While dressing some suppurating wounds, purulent matter was absorbed, in consequence of his hands being slightly chapped. After becoming aware of the accident that had happened him, he was not alarmed, but for awhile continued to attend to his business. The severity of the symptoms, however, increasing, he called in Dr. W. H. Mussey, who afterward consulted with Dr. Comegys; but, we believe, these gentlemen felt no uneasiness in regard to his final recovery. On Sunday, however, the day of his death, brain symptoms suddenly manifested themselves, and he died from their effects.

Dr. Wood, we have understood, was a member of the profession for more than thirty-five years. The greater part of that time he practiced in Cincinnati. We have known him nearly twenty-five years. For quite a number of years he was Professor of Anatomy in the Medical College of Ohio, and was held in high estimation by the students of that institution. During that time, and for a number of years subsequently, he was surgeon to the Cincinnati Hospital. He was also for a number of sessions Professor of Surgery in the College of Medicine and Surgery. For several years he owned and edited the *Lancet*, the only medical journal published at the time in Cincinnati.

Dr. Wood was an exceedingly modest and unassuming man. If he had not been so, with the talents he possessed, and the record he had made of distinguished surgical operations, he would have held a foremost place among the great surgeons of the world. All of the capital operations of surgery he had performed many times with success. In surgical gynecology he was especially

distinguished, having had a success in a number of operations that has as yet never been eclipsed by any of the most noted gynecologists. He, however, seldom or never reported any of his remarkable cases in the medical journals, so that the knowledge of them was confined largely to his acquaintances. But, besides his surgical learning and skill, he was well informed in the natural sciences, taking an active interest in the study, especially of geology and entomology. Illustrating these latter, he had collected quite an extensive and valuable cabinet of specimens. He has at times highly interested us in exhibiting to us his many curiosities. He had the largest and most interesting collection of spiders we ever saw, which he had obtained from many places, some coming from great distances, as from Mexico, Nicaragua, etc. Some specimens of this class of Arachnida were immense in their size. In his various researches he used the microscope a great deal, not, however, as an "*advanced*" microscopist, but to aid him in the study of the minute objects of investigation. When thus using the instrument that has revealed to man a world before unknown and unsuspected, he delighted to gather about him such young medical students whom he knew had a love of study, and appreciated scientific research, and exhibit to them its wonderful developments.

Before concluding, we will say that, in the decease of Dr. Wood, the profession of medicine has lost one of its most eminent and useful members—a physician who loved science for itself, and who cultivated it simply because he loved it, and not for any *eclat* that might result. He was the least vainglorious of any one we ever knew. In his association with his professional brethren he was kind and gentle, and always lent his assistance with seeming pleasure. He had no sympathy in any of the miserable cliques that exist in Cincinnati. Our own intercourse with him was always pleasant, and we regarded his abilities with the highest respect. He was a paying subscriber of the MEDICAL NEWS from its commencement, thirteen years ago, and has frequently expressed his esteem of it.

PUBLIC SCHOOL FAILURE.—The December number of the *North American Review* contains an article with the above heading which will surprise most persons by its state-

ments. It regards the public schools of this country as almost a complete failure in accomplishing the objects for which they are designed—those institutions which our orators have declared to be the pride and boast of our great free government. We quote: "There is probably not one of those various social contrivances, political engines or modes of common action called institutions which are regarded as characteristic of the United States which are so unworthy of either confidence or pride; not one which has failed so completely to accomplish the end for which it was established."

The writer does not found his statements on any theory or belief that education does not, contrary to what is supposed by most persons, make persons better, but because the public schools *fail* to impart an education. As for ourself, we have never believed that education, by which we mean book learning, makes the heart better, that it has in itself an elevating or purifying effect upon the moral conduct. The feelings and the intellect are entirely different departments in the individual, and the culture of one does not bring about culture of the other by any means. Some of the greatest rascals in the world have been men of education, thus showing that intellectual culture, in their case, had not accomplished what the public has assumed as an axiom, that wrong-doing will diminish in proportion as people are educated.

But we have set out, not to express our own views, but to relate what the writer in the *Review* says. According to him the public schools fall short as follows, quoting his language: "According to independent and competent evidence from all quarters, the mass of the pupils of these public schools are unable to read intelligently, to spell correctly, to write legibly, to describe understandingly the geography of their own country, or to do anything that reasonably well-educated children should do with ease. They can not write a simple letter; they can not do readily and with quick comprehension a simple 'sum' in practical arithmetic; they can not tell the meaning of any but the commonest of the words that they read and spell so ill. There should not be need to say that many of them—many in actual numbers—can do all these things fairly well; but these many are few indeed in proportion to the millions who receive a public school education. They can give rules glibly; they can recite

from memory; they have some dry, disjointed knowledge of various ologies and osophies; they can, some of them, read a little French or German with a very bad accent; but as to such elementary education as is alike the foundation of all real higher education and the *sine qua non* of successful life in this age, they are, most of them, in almost as helpless and barren a condition of mind as if they had never crossed the threshold of a school-house."

In the city of New York $3,805,000 were spent in 1879 for public school education alone.

Milk and Its Uses.—Among our selections will be found a valuable article upon milk, in which is described its properties and therapeutic uses. We are sure it will be read with interest. As supplemental to what is stated in it, we will state that we have in mind a gentleman who, when we saw him the last time, had taken no other nourishment than milk, not even a mouthful of bread, for six weeks. Previous to his commencing to subsist on an exclusively milk diet, his urine was loaded with albumen, and his lower limbs at times would exhibit some swelling. It was evident that he had Bright's disease—the initial stage of it. When we saw him at the time mentioned, albumen had almost disappeared from his urine, and all swelling had subsided. He was in the enjoyment of very good health, and, in the discharge of his duties as a collector, he was able to walk many squares every day. In fact, he was on his feet pretty much all the time from morning to night, and suffered very little from fatigue. A number of other similar cases have come under our notice; and our observation, so far, would lead us to suppose that it is beneficial in cases of Bright's disease.

The article to which we refer proves how essential it is that perfect cleanliness should exist about a dairy. The cattle should be kept clean, and especially should cleanliness be attended to when cows are kept in stalls in winter time. Some cow-yards and stables become disgustingly filthy; and, under such circumstances, the milk, in consequence of its absorbing properties, must become very unhealthy as food, especially in cases of infants and children using it. Quite often have the milk inspectors, on visiting the premises of different dairymen, who supply milk to the families of this city, reported the stables and

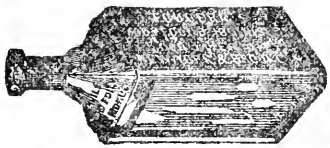
pens in a most filthy condition. Such dairymen are responsible for a great deal of sickness. How many deaths they cause in the course of a year, it is difficult to say, but, undoubtedly, a great many. We are not inclined to be sentimental, but we can say truthfully that hundreds are the little graves that are dug as the result of poisonous milk furnished by them. If burglars and highwaymen are sent to the penitentiary, much more should be the man who keeps a filthy dairy.

The North American Review.—This magazine is published monthly by Messrs. D. Appleton & Co., of New York, at $5 a year. There is no magazine published that holds a higher position. The December issue, which is before us, has the following articles: "Future of the Republican Party; Discoveries at Olympia; Rational Sunday Observance; Southern Statesmen and their Policy; Ruins of Central America; Distribution of Time; Public School Failure; Validity of the Emancipation Edict."

All of the contributors are of the highest literary ability.

Appointment of a Trustee.—We are informed that Gov. Foster has appointed Mr. B. F. Brannan a trustee of the Cincinnati Hospital in place of Mr. M. B. Hagans, resigned. The appointment is an eminently good one. Mr. Brannan has before been a trustee, and, as such, gave general satisfaction. As a humane gentleman, he will labor to make the institution efficient in rendering assistance to the needy sick.

FOUGERA'S

COMPOUND  IODINISED

COD LIVER OIL.

The immeasurable therapeutic superiority of this oil over all other kinds of Cod Liver Oils, sold in Europe or in this market, is due to the addition of IODINE, BROMINE and PHOSPHORUS.

This oil possesses the nourishing properties of Cod Liver Oil, and also the tonic, stimulant and alterative virtues of IODINE, BROMINE and PHOSPHORUS, which are added in such proportion as to render FOUGERA'S COD LIVER OIL FIVE TIMES STRONGER and more efficacious than pure Cod Liver Oil.

Fougera's Ready-made Mustard Plasters

(DAMPNESS SPOILS THEM.)

A most useful, convenient, and economical preparation, always ready for immediate use. Clean, prompt in its action, and keeps unaltered in any climate, easily transported and pliable, so as to be applied to all parts and surfaces of the body. It is prepared of two strengths:—No. 1, of pure mustard; No. 2, of half mustard. Each kind put up separately, in boxes of 10 plasters. Price, 40 cents.

DIRECTIONS.—Dip the plaster, a minute or two, in cold water, and apply with a band.

FOUGERA'S IODO-FERRO-PHOSPHATED ELIXIR OF HORSE-RADISH

This Elixir contains Iodine, Pyrophosphate of Iron, the active principle of anti-scorbutic and aromatic plants, and acts as a *tonic, stimulant, emmenagogue* and *a powerful regenerator of the blood.* It is an invaluable remedy for all constitutional disorders due to the impurity and poverty of the blood. One of the advantages of this new preparation consists in combining the virtues of Iodine and Iron, without the inky taste of Iodide of Iron.

Fougera's Compound Iceland Moss Paste

(Iceland Moss, Lactucarium, Ipecac and Tolu.)

Used with great success against nervous and convulsive coughs, Whooping Cough, Acute Bronchitis, Chronic Catarrh, Influenza, &c.

Wakefulness, Cough, and other sufferings in Consumption, are greatly relieved by the soothing and expectorant properties of this paste.

E. FOUGERA, Pharmacist,

No. 372 7th Street, Brooklyn, L. I.

Sole Proprietor and Manufacturer of the above, to whom all special communications should be addressed.

E. FOUGERA & CO., 30 North William St., New York

SOLE GENERAL AGENTS,

To whom all orders should be addressed.

FOR SALE BY DRUGGISTS GENERALLY.

FACTS FROM OHIO.

E USE OF DEXTRO-QUININE IN INTERMITTENT FEVER.

Name, nd sex of patient.	*Age, etc.*	*No. paroxysms before taking.*	*Paroxysms after taking.*	*Dose and mode of exhibition.*	*Total amount exhibited.*	*Remarks, pathological and physiological phenomenon, etc.*	*Reported by*
Miss D.	28	Unknown, a great many.	0	3 grs. every 3 hours.	30 grs.	Had been under treatment about four months with Cinchonidia Sulphate, which would control the paroxysms at the moment but they would invariably return. Used *Dextro-Quinine* in the same doses and there has been no return of the chills. Another case, Mrs. B., æt. 77, was unable to take Cinchonidia on account of the severe tinnitis aurium. etc. I prescribed *Dextro-Quinine* without any head symptoms with satisfactory result.	G. S. Krieger, M.D., Lebanon, O.
:o. C., male. 'Has used iinine un- the name t gave him : horrors."	28 Single.	Unknown, has been suffering with almost daily paroxysms for nearly 2 years.	0	9 grs., in three doses of 3 grs. each, 3, 2, and 1 hour before the expected attacks.	9 grs.	Missed chill on first day, put him on pills containing *Dextro-Quinine*, Ferri. Acid Arsenious and Ext. Nux Vom., and has had no return of chill to date. This man in connection with the chills was down with the yellow fever in Memphis during the late scourge. He returned here and has been under my treatment ever since his return. I have used Quinine and Cinchonidia with very poor success in his case.	B. S. Chambers, M.D., Cincinnati, O.
ss Smith.	27	3	0	4 grs. every 2 hours combined with ½gr. doses of Capsicum.	16 grs.	The best word I can say for *Dextro-Quinine* is, that I have not prescribed any other anti-periodic since receiving sample of *Dextro-Quinine*. I find the action more certain when combined with Capsicum, as I also did with Sulphate of Quinine.	J. W. Lisle, M. D., Millfield, Ohio.
ss Artz.	25	For 3 years more or less frequently.	1	4 grs. every 3 hrs. until 16 grs. were given, then same repeated.	32 grs.		
Mrs. C. 'aken Quie without y effect.	25	15	0	2 gr. pills, 2 every 2 hours.	34 grs.	Had taken quinine without any effect. Had had no return since using the *Dextro-Quinine*. Now over four months.	J. Frank Vigor, M.D., Gilead Station, Ohio.
ena Rush. id taken 15 s. of Quinia ily without effect.	26, mother 4 children	8	0	2 gr. pill every hour till 5 were taken.	20 grs.	Paroxysm every day about 4 p.m. Cold and hot stages short, followed by very profuse sweating. Had taken Sulphate of Quinia 15 grs. per day, without any effect whatever.	A. J. Learned, M.D., Pataskala, Ohio.
Mr. C.C.	40	20 or more.	0	5 grs. every 3 hrs. until 30 gr. taken, then 5 gr. 3 times a day.	120 grs.	I find that it is equally as good as Quinine Sulphate, with none of the unpleasant head symptoms derived from the latter.	J. F. Heady, A.M., M.D., Springdale, Ohio.
Mr. H.O.	42	Two, but often had them previously.	0	5 grs. every hr., till 30 grs. were given.	30 grs.	Perfectly satisfactory. Have obtained only good results in the cases in which I have used the *Dextro-Quinine*.	
as. L.	26	About 30.	0	15 grs., in 3 powders, 3, 2, and 1 hr. before the chill.	15 grs.	In all these cases I began treatment with Cathartic, then after chill was checked put them on tonics, and on 7th, 14th and 21st days, I repeated the dose in lessened quantities. I very seldom have any trouble with return of chill.	B. S. Chambers, M.D., District Physician, Newport, Ky.
Annie C.	17	3	0	12 grs., in 4 pills, 2 at night and 2 in morning.	12 grs.	I sent you report of the 1st case I had, Geo. Caldwell, which was the worst case I have ever seen. He has never had any return. I have used it in a large number of cases with about the same average result as when I used the Sulph. of Quinine. I cannot say that I see much difference between *Dextro-Quinine* and Sulphate of Quinine. I send 3 reports of cases from my own O. D. P. list. Of course, cases of this kind are usually of the very worst type. I send from my list, cases Nos. 18, 33, and 48.	
;. J., col'd.	38	About 30.	0	20 grs., in 4 pills, 4, 3, 2 and 1 hour before chill time.	20 grs.		

ND FOR CLINICAL DETAILS OF 1,000 CASES.

TRO-QUININE sent by mail to Physicians who cannot be supplied by their local ruggists. Address

KEASBEY & MATTISON, Philadelphia.

Kirkwood's Inhaler.

This is the only complete, reliable and effective inhaler in use, arranged for the direct application of Muriate of Ammonia and other remedial agents in the state of vapor to the diseased parts of the air passages in the treatment of catarrh and diseases of the throat and lungs. No heat or warm liquids required in its use.

It is entirely different from the various frail, cheap instruments that have been introduced.

KIRKWOOD'S INHALER is accompanied by testimonials of the highest professional character, together with carefully prepared formulas for use.

Retail Price, complete, $5.00; Small size, $2.50.

A liberal discount allowed to the trade and profession.

For descriptive pamphlets, or other information, address

E. FOUGERA & CO.,

30 North William Street, New York.

DOCTOR RABUTEAU'S

Dragees, Elixir and Syrup of Iron.

The numerous experiments made by the most distinguished practitioners of our days in France and America have demonstrated that Dr. Rabuteau's preparations of Iron are superior to all other chalybeates in the treatment of *Chlorosis, Anæmia, Debility, Exhaustion, Convalescence, Weakness of Children*, and all diseases caused by a deterioration of the blood.

Dr. Rabuteau's Dragees (sugar coated pills) do not blacken the teeth, and are assimilated by the most delicate stomachs without causing constipation. Dose, 2 morning and evening, at meal time.

Dr. Rabuteau's Elixir is especially adapted to weak persons, whose digestive functions need strengthening or stimulating.

Dr. Rabuteau's Syrup is especially prepared for children, who take it readily because of its agreeable taste.

Prepared by CLIN & CO., Pharmacists, Paris.

BLANCARD'S PILLS

OF UNCHANGEABLE IODIDE OF IRON.

Blancard's Pills of Iodide of Iron are so scrupulously prepared, and so well made that none other have acquired a so well deserved favor among physicians and pharmaceutists. Each pill, containing one grain of prot.-iodide of iron, is covered with finely pulverised iron, and covered with balsam of tolu. Dose, two to six pills a day. The genuine have a *reactive silver seal* attached to the lower part of the cork, and a green label on the wrapper, bearing the fac-simile of the signature of

Blancard

Pharmacien, No. 40 Rue Bonaparte, Paris.

without which none are genuine.

BEWARE OF IMITATIONS.

BE PARTICULAR TO GET THE GENUINE

Kidder's Saccharated Pepsine.

TAKE NO OTHER.

OUR PEPSINE IS NOT SOLD IN BULK; the only way you can get the genuine is in original packages, as follows:

ONLY STYLES OF KIDDER'S SACCHARATED PEPSINE.

One ounce, four ounce and eight ounce oblong white flint glass bottles, with our name (Kidder & Laird) blown in the bottle, and sixteen ounce round (plain) bottles, all having on them our metallic caps and labels. THESE ONLY STYLES, THE GENUINE, are sold at 35 cents per ounce, in quantities less than a pound, and $4 50 by the pound.

CALIFORNIA.

SAN FRANCISCO, CAL., Sept. 13th, 1878.

KIDDER & LAIRD:

Gentlemen—I have used Kidder's Saccharated Pepsine in my own family with the most satisfactory results, and consider it one of the best preparations of the kind manufactured. Yours, etc.,

JAMES G. STEELE, *Chemist.*

SAN FRANCISCO, CAL., July 1st, 1878.

KIDDER & LAIRD:

Gentlemen—We find it very satisfactory, and will always purchase your brand hereafter. Yours, etc.,

LAFORE & KAHN.

CONNECTICUT.

BRIDGEPORT, CONN., July 15th, 1878.

KIDDER & LAIRD:

Gentlemen—The physicians have used it in prescriptions, and think it a valuable preparation, and as good as they ever saw, and will give it the preference in their practice. I have been using Hawley's for the last five or six years. Yours, etc.,

W. & E. SHELTON.

WILLINGTON, CONN., Sept 29th, 1877.

KIDDER & LAIRD:

Gents—Your elegant preparation of Pepsine has been received. I think it superior to any that I have ever used in my practice. Yours, etc.,

W. L. KELSEY, M. D.

ILLINOIS.

EDGEWOOD, ILL., July 11th, 1878.

KIDDER & LAIRD:

Gentlemen—I find Kidder's Saccharated Pepsine a fine article and very effective in conjunction with other treatments in cases of cholera infantum; would recommend it highly in such cases. Yours, etc.,

JOSEPH HALL, M. D.

MILLSTADT, ILL., June 25th, 1878.

KIDDER & LAIRD;

Gentlemen—I have adopted the use of Kidder's Saccharated Pepsine in preference to any other. It has proved satisfactory in every respect. Yours, etc.,

F. H. KRING.

STANTON, ILL., July 30th, 1878

KIDDER & LAIRD:

Gentlemen—Please send me one pound of Kidder's Saccharated Pepsine. This makes two and three-quarter pounds. I have used it mostly in prescriptions, and prescribed it in my practice, and find it a reliable article. Yours, etc,

GEORGE ELLY, M. D.

STONE CREEK, ILL., June 15th, 1878.

KIDDER & LAIRD:

Gentlemen—I gave forty grains, in ten-grain doses, and it acted like a charm; shall use no other.

Yours, etc., L. HOBIE, M. D.

WELLINGTON, ILL., March 2d, 1878.

KIDDER & LAIRD:

Gentlemen—I shall be glad to avail myself of another supply when needed. I have tested it, and find it fully up to your representations

Yours respectfully, DANIEL WESTON.

INDIANA.

GALVESTON, IND., July 8th, 1878.

KIDDER & LAIRD:

Gentlemen—I have given your Kidder's Saccharated Pepsine my careful attention, and find it a splendid preparation. I can recommend it in my practice on account of its good qualities

Yours, etc., B. U. LOOP.

INDIANAPOLIS, IND., July 12th, 1878.

KIDDER & LAIRD:

Gentlemen—Have given Kidder's Saccharated Pepsine in a number of cases of dyspepsia; also given it to the physicians in this locality, who were well pleased with the superior quality of it.

Yours, etc., S. J. HILLMAN, M. D.

SULLIVAN, IND., July 11th, 1878.

KIDDER & LAIRD:

Gentlemen—I have prescribed your Saccharated Pepsine, and recommended it to several physicians, who have used it and pronounce it a first-class article.

Respectfully yours, H. MALOTT, M. D.

WATERMAN, IND., July 19th, 1878.

KIDDER & LAIRD

Gentlemen—I have ascertained from three doctors, in my neighborhood that your Kidder's Saccharated Pepsine is a better article than some of the more expensive preparations. Yours, etc.,

OLIVER LA TOURETTE.

LOUISIANA.

DELHI, RICHMOND PARK, LA., March 20th, 1878.

KIDDER & LAIRD:

Gents—When in need of Pepsine will always order Kidder's in preference to all others, as I like it best.

Yours very respectfully, E. W. THOMSON.

MANSFIELD, LA., Jan. 31st, 1878.

KIDDER & LAIRD:

Gents—I know it to be an excellent remedy, and shall in future keep it always on hand, both for my practice and myself. Yours respectfully,

R. T. GIBBS, M. D.

MARYLAND.

ANNAPOLIS, June 20th, 1878.

KIDDER & LAIRD

Gentlemen—Since the reception of your sample of Kidder's Saccharated Pepsine we have used no other. We consider it a first-class preparation. We have never heard anything to the contrary. We shall continue to dispense it unless well-founded objections are made, which we do not fear. We purchase from Messrs. Thomsen & Muth. Yours, etc.,

J. F. PERKINS & BRO.

BALTIMORE, June 19th, 1878.

KIDDER & LAIRD:

Gentlemen—I am using Kidder's Saccharated Pepsine with a great deal of satisfaction. I tested it with Scheffer's, and could not detect the least difference, and, in consequence, have had a number of pounds of yours, purchased from Thomsen & Muth.

Yours, etc., ISAAC R. BEAM.

BALTIMORE, June 19th, 1878.

KIDDER & LAIRD:

Gentlemen—Your Kidder's Saccharated Pepsine appears to be all you claim for it. I have not bought a grain elsewhere since I commenced using yours.

Yours, etc, C. A. GOSNELL.

BALTIMORE, MD., June 20th, 1878.

KIDDER & LAIRD:

Gentlemen—Your Kidder's Saccharated Pepsine has given good satisfaction. It is all you claim for it. Will hereafter use none but Kidder's.

Yours, etc., A. C. HUTHWELKER.

181 LEXINGTON ST., BALTIMORE, MD.

KIDDER & LAIRD:

Gentlemen—Have used Kidder's Saccharated Pepsine for the past year with entire satisfaction. I use no other except specially prescribed. I obtain my supply from Messrs. W. H. Brown & Bro., or Messrs. Thomsen & Muth, Baltimore.

Yours, etc., H. C. MOORE, M. D.

BALTIMORE, June 21st, 1878.

KIDDER & LAIRD:

Gentlemen—I have used Kidder's Saccharated Pepsine alongside Scheffer's, Boudault's, and others, as ordered, and have no reason to believe yours below the standard.

Yours, etc., JOHN SCHWARTZ.

CUMBERLAND, MD., Jan. 21st, 1878.

KIDDER & LAIRD:

Dear Sirs—Kidder's Saccharated Pepsine meets every want of the physicians here.

Very truly, J. F. ZACHARIAS.

Samples and Circulars sent to Druggists or Physicians on application to

KIDDER & LAIRD, 83 John Street, New York.

For Consumption and Wasting Diseases.

—o—

HYDROLEINE

Has been proved of the highest value in CONSUMPTION and all WASTING DISEASES, invariably producing immediate increase in FLESH and WEIGHT.

FORMULA OF HYDROLEINE.

Each dose of two teaspoonsful, equal to 120 drops, contains:

Pure Oil	**80 m. (drops).**	**Soda**	**1-3 grains.**
Distilled Water	**35 "**	**Boric Acid**	**1-4 "**
Soluble Pancreatin, 5 grains.		**Hyocholic Acid**	**1-20 "**

Dose—Two teaspoonsful alone, or mixed with twice the quantity of soft water, to be taken thrice daily with meals

The principles upon which this discovery is based have been described in a treatise on "*The Digestion and Assimilation of Fats in the Human Body*," by H. C. Bartlett, Ph. D., F. C. S., and the experiments which were made, together with cases illustrating the effect of Hydrated Oil in practice, are concisely stated in a treatise on "*Consumption and Wasting Diseases*," by G. Overend Drewry, M. D.

In these treatises the Chemistry and Physiology of the Digestion of the Fats and Oils is made clear, not only by the description of a large number of experiments scientifically conducted, but by cases in which the deductions are most fully borne out by the results

☞**Copies of these valuable works will be sent free on application.**

Hydrated Oil Hydroleine, Water and Oil,

May be described as partially digested oil, which will nourish and produce increase in weight in those cases where oils or fats, not so treated, are difficult or impossible to digest. In CONSUMPTION and other WASTING DISEASES the most prominent symptom is *emaciation*, of which the first is the starvation of the fatty tissues of the body, including the brain and nerves. This tendency to emaciation and loss of weight is arrested by the regular use of HYDROLEINE, which may be discontinued when the usual average weight has been permanently regained.

The ordinary so-called emulisons of Cod Liver Oil and other fats, *whether pancreatized or not*, merely remain in the form of a course mechanical mixture for a short time after agitation. The digestion of oil, having in no sense been artificially produced, still devolves upon those functional powers, the deficiency of which is the most prominent symptom in these cases.

HYDROLEINE is not a patent medicine or a secret preparation; the formula is on every bottle. Can be taken by the most delicate stomach; is immediately assimilated

The permanence and perfection of the emulsion, and the extreme solubility of the HYDRATED OIL, solely prepared and sold by us under the name of HYDROLEINE, is shown by its retaining its creamlike condition as long as the purest Cod Liver Oil will retain its sweetness. Unlike the preparations mentioned, or simple Cod Liver Oil, it produces no unpleasant eructation or sense of nausea, and should be taken in such very much smaller doses, according to the directions, as will insure its complete assimilation; this, at the same time, renders its use economical in the highest degree.

To brain-workers of all classes, Hydrated Oil is invaluable, supplying, as it does, the true brain food. Economical in use; certain in result. Tonic; digestive and highly nutritive.

NEW Principle for the Assimilation of FAT

WILLIAM F. KIDDER, Agent for the United States.

Depot: 83 John Street, - - - NEW YORK.

PARIS, 1867 | 1868. | 1872 | 1873, VIENNA.

Prize Medal.


Silver Medal.


Gold Medal.


Medal of Merit.

BOUDAULT'S PEPSINE,

And Wine, Elixir, Syrup, Pills and Lozenges of Pepsine.

Since 1854, when Pepsine was first introduced by Messrs. CORVISART and BOUDAULT, **Boudault's Pepsine** has been the only preparation which has at all times given satisfactory results.

The medals obtained by **Boudault's Pepsine** at the different exhibitions of 1867, 68, 1872, and recently at the Vienna Exhibition of 1873, are unquestionable proofs of its excellence.

In order to give physicians an opportunity to judge for themselves, all Boudault's Pepsine will hereafter be accompanied by a circular giving plain directions for testing it. These tests will enable any one to satisfy himself of the **superiority of Boudault's Pepsine,** which is really the *cheapest,* since its use will not subject physicians and patients alike to disappointment.

CAUTION.—In order to guard against imitations each bottle will hereafter be sealed by a red metallic capsule, bearing the stamp of our trade mark, and secured by a band having a fac-simile of the medals, and the signature of Hottot, the manufacturer.

Is sold in 1 oz., 8 oz., 16 oz., Bottles.

E. FOUGERA & CO., New York,

GENERAL AGENTS FOR THE U. S.

E. FOUGERA & CO.'S

Medicated Globules.

The form of Globules is by far the most convenient as well as the most elegant form for administering liquid preparations or powders of unpleasant taste or odor. The following varieties are now offered:

Globules of **Ether; Chloroform; Oil of Turpentine; Apiol; Phosphorated Oil,** containing 1-60th grain of Phosphorus; **Phosphorated Oil,** containing 1-30th grain of Phosphorus; **Tar; Venice Turpentine; Copaiba; Copaiba & Tar; Oleo-Resin of Cubebs; Balsam of Peru; Oil of Eucalyptus; Cod Liver Oil; Rhubarb; Bi-carb. of Soda. Sulph. Quinia, &c.**

The superiority of these Globules over other forms consists in the ease with which they are taken, and in their ready solubility and hence promptness of action.

They are put up in bottles of 100 each.

For descriptive circulars and samples address,

E. FOUGERA & CO.,

30 North William Street, New York.

BELLEVUE HOSPITAL MEDICAL COLLEGE

CITY OF NEW YORK.

SESSIONS OF 1880-'81.

THE COLLEGIATE YEAR in this Institution embraces the Regular Winter Session, and a Spring Session. THE REGULAR SESSION will begin on Wednesday, September 15, 1880, and end about the middle of March, 1881. During this Session, in addition to four didactic lectures on every week-day except Saturday, two or three hours are daily allotted to clinical instruction. Attendance upon three regular courses of lectures is required for graduation. THE SPRING SESSION consists chiefly of recitations from Text-Books. This Session begins about the middle of March and continues until the middle of June. During this Session, daily recitations in all the departments are held by a corps of Examiners appointed by the Faculty. Short courses of lectures are given on special subjects, and regular clinics are held in the Hospital and in the College building.

FACULTY.

ISAAC E. TAYLOR, M. D.,
Emeritus Professor of Obstetrics and Diseases of Women and Children, and President of the Faculty.

JAMES R. WOOD, M. D., LL. D.,
Emeritus Professor of Surgery.

FORDYCE BARKER, M. D., LL. D.
Professor of Clinical Midwifery and Diseases of Women.

BENJAMIN W. McCREADY, M. D.,
Emeritus Professor of Materia Medica and Therapeutics, and Prof. of Clinical Medicine.

AUSTIN FLINT, M. D.,
Professor of the Principles and Practice of Medicine and Clinical Medicine.

W. H. VAN BUREN, M. D., LL.D.,
Professor of Principles and Practice of Surgery, Diseases of Genito-Urinary System and Clinical Surgery.

LEWIS A. SAYRE, M. D.,
Professor of Orthopedic Surgery and Clinical Surgery.

ALEXANDER B. MOTT, M. D.,
Professor of Clinical and Operative Surgery.

WILLIAM T. LUSK, M. D.,
Professor of Obstetrics and Diseases of Women and Children, and Clinical Midwifery.

A. A. SMITH, M. D.,
Professor of Materia Medica and Therapeutics, and Clinical Medicine.

AUSTIN FLINT, JR., M. D.,
Professor of Physiology and Physiological Anatomy, and Secretary of the Faculty.

JOSEPH D. BRYANT, M. D.,
Professor of General, Descriptive and Surgical Anatomy.

R. OGDEN DOREMUS, M. D., LL.D.,
Professor of Chemistry and Toxicology.

EDWARD G. JANEWAY, M. D.,
Professor of Pathological Anatomy and Histology, Diseases of the Nervous System, and Clinical Medicine.

PROFESSORS OF SPECIAL DEPARTMENTS, Etc.

HENRY D. NOYES, M. D.,
Professor of Opthalmology and Otology.

J. LEWIS SMITH, M. D.,
Clinical Professor of Diseases of Children.

EDWARD L. KEYES, M. D.,
Professor of Dermatology, and Adjunct to the Chair of Principles of Surgery.

JOHN P. GRAY, M. D., LL.D.,
Professor of Psychological Medicine and Medical Jurisprudence.

ERSKINE MASON, M. D.,
Clinical Professor of Surgery.

JOSEPH W. HOWE, M. D.,
Clinical Professor of Surgery.

LEROY MILTON YALE, M. D.,
Lecturer Adjunct on Orthopedic Surgery.

BEVERLY ROBINSON, M. D.,
Lecturer on Clinical Medicine.

FRANK H. BOSWORTH, M. D.,
Lecturer on Diseases of the Throat.

CHARLES A. DOREMUS, M. D., PH. D.,
Lecturer on Practical Chemistry and Toxicology, and Adjunct to the Chair of Chemistry and Toxicology.

FREDERICK S. DENNIS, M. D., M. R. C. S.,

WILLIAM H. WELCH, M. D.,
Demonstrators of Anatomy.

FACULTY FOR THE SPRING SESSION.

FREDERICK A. CASTLE, M. D.,
Lecturer on Pharmacology.

WILLIAM H. WELCH, M. D.,
Lecturer on Pathological Histology.

CHARLES A. DOREMUS, M. D., PH. D.,
Lecturer on Animal Chemistry.

T. HERRING BURCHARD, M. D.,
Lecturer on Surgical Emergencies.

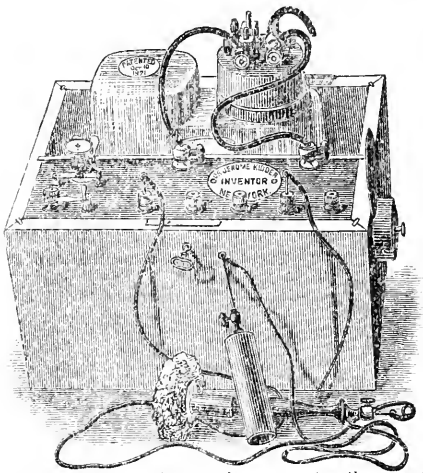
Lecturer on Normal Histology.
CHARLES S. BULL, M. D.,
Lecturer on Ophthalmology and Otology.

THE FEES for the REGULAR SESSION are as follows:—Fees for the first and second year, each, $140; Fees for all third-year Students and for all Graduates of other Colleges, $100; Matriculation Fee, $5; Dissection Fee (including material for dissection), $10; Graduation Fee, $30, or $10 for each of the three yearly examinations. The following are the FEES for the SPRING SESSION:—Matriculation (Ticket valid for the following Winter), $5; Recitations, Clinics, and Lectures, $35; Dissection (Ticket valid for the following Winter), $10.

MATRICULATION EXAMINATION.—The matriculation examination will consist of English composition (one foolscap page of original composition upon any subject, in the handwriting of the candidate); Grammar, an examination upon the above-mentioned composition; Arithmetic, including vulgar and decimal fractions; Algebra, including simple equations; Geometry, first two books of Euclid. This examination will be waived for those who have received the degree of A. B., those who have passsd the Freshman examination for entrance into any incorporated literary college, those who present certificates of proficiency in the subjects of the matriculation examination from the principal or teachers of any reputable high school, and those who have passed a matriculation examination at any recognized medical college or at any scientific school or academy in which an examination is required for admission.

☞For the Annual Circular and Catalogue, giving full Regulations for Graduation and other information, address Prof. AUSTIN FLINT, Jr., Secretary, Bellevue Hospital Medical College.

Dr. Jerome Kidder's Electro Medical Apparatus,



For which he has received 21 Letters Patent for improvements, rendering them superior to all others, as verified by award of First Premium at **Centennial;** also First Premium by American Institute from 1872 to 1879 inclusive, and, in 1875, **Gold Medal.**

☞Please note the following, for which the

GOLD MEDAL

was awarded by American Institute in 1875, to distinguish the Apparatus as of **The First Order of Importance:**

Dr. Jerome Kidder's Improved No. 1.
Physician's Office Electro Medical Apparatus.

Dr. Jerome Kidder's Improved No. 2.
Physician's Visiting Machine, with turn-down helix.

Dr. Jerome Kidder's Improved No. 3.
Physician's Visiting Machine (another form).

Dr. Jerome Kidder's Improved No. 4.
Office and Family Machine.

Dr. Jerome Kidder's Improved No. 5.
Tip Battery Ten Current Machine (see cut).

A most perfect and convenient apparatus, the invention of Dr. Kidder. We also manufacture superior Galvanic Batteries, from 6 to 36 cells; also Pocket Induction Apparatus. **Beware of Imitations.**

For the genuine, send for Illustrated Catalogue.

Address, **ALBERT KIDDER & CO.,**
Successors, 820 Broadway, New York.

SCOTT'S EMULSION

PURE COD LIVER OIL

WITH

HYPOPHOSPHITES OF LIME AND SODA

PERFECT, PERMANENT, PALATABLE.

The high character and wide reputation SCOTT'S EMULSION has attained through the agency of the Medical Profession, and the hearty support they have given it since its first introduction, is a sufficient guarantee of its superior virtues. The claims we have made as to its permanency—perfection and palatableness—we believe have been fully sustained, and we can positively assure the profession that its high standard of excellence will be fully maintained. We believe that the profession will bear us out in the statement that no combination has produced as good results in the wasting disorders, incident to childhood; in the latter, as well as the incipient stages of Phthisis, and in Scrofula, Anæmia and General Debility. We would respectfully ask the profession for a continuance of their patronage, and those who have not prescribed to give it a trial. Samples will be furnished free on application.

FORMULA.—50 per cent. of pure Cod Liver Oil, 6 grs. of the Hypophosphite of Lime, and 3 grs. of the Hypophosphite of Soda to a fluid ounce.

SCOTT & BOWNE,
Manufacturing Chemists, 125 Hudson Street, N. Y.

MESSRS. SCOTT & BOWNE: New York, *September* 4, 1876.

GENTS—I have prescribed Scott's Emulsion of Cod Liver Oil with Hypophosphites in both private and hospital practice, and consider it a valuable preparation. It remains as a permanent emulsion even in extremely hot weather, and is more palatable than any other preparation of oil that I have used. Yours, very respectfully,

ROBERT WATTS, M. D., President Medical Board Charity Hospital.

New York, *September* 2, 1876, 66 West Thirty-sixth Street.

MESSRS. SCOTT & BOWNE:

GENTS—I have frequently prescribed Scott's Emulsion of Cod Liver Oil with Hypophosphites during the last year, and regard it as a valuable preparation in scrofulous and consumptive cases—palatable and efficacious. C. C. LOCKWOOD, M. D.

MESSRS. SCOTT & BOWNE:

GENTLEMEN—Within the last two months I have fairly tried Scott's Emulsion of Cod Liver Oil with Hypophosphites, and I candidly declare that it is the finest preparation of the kind that has ever been brought to my notice. In affections of the lungs, and other wasting diseases, we consider it our most reliable agent. In a perfectly elegant and agreeable form.

Very truly,

J. SIMONAUD, M. D., New Orleans, La.

MESSRS. SCOTT & BOWNE: Chicago, *November* 7, 1878.

I have prescribed Scott's Emulsion of Cod Liver Oil, etc., to a considerable number of patients, and have been much pleased with its effects. I have very rarely met with a case in which it was indicated where it was not taken without repugnance. It is comparatively agreeable to the taste; is well tolerated by the stomach, and has so far furnished all the beneficial results expected from the combination.

Respectfully yours, J. ADAMS ALLEN, M. D., LL. D.,

President and Professor of the Principles and Practice of Medicine in Rush Medical College, Chicago, Ill.

GENTLEMEN—I fully concur in the above recommendation: having used the remedy in several cases. JOS. P. ROSS, A. M., M. D.,

Professor of Clinical Medicine and Diseases of the Chest, Rush Medical College, Chicago, Ill.

MESSRS. SCOTT & BOWNE: Louisville, *December* 7, 1878.

I have been using Scott's Emulsion of Cod Liver Oil with Hypophosphites in my practice for several years, with more satisfaction growing out of success than any other preparation I have ever used. I commend it to my classes in the University of Louisville, as much the best article of Cod Liver Oil. Respectfully yours,

T. S. BELL.

Electrical Instruments

— FOR —

PHYSICIANS AND SURGEONS.

HIGHEST AWARDS

FROM THE

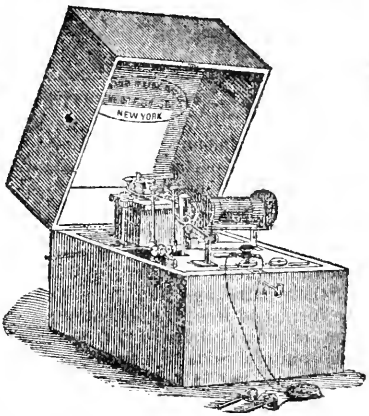
Franklin Institute

OF

PHILADELPHIA.

Names of Judges:

Prof. B. Howard Rand, M.D.
Prof. Joseph Carson, M.D.
Prof. H. C. Wood, Jr., M.D.
Dr. J. Solis Cohen.
Dr. Geo. R. Morehouse.



FROM THE

American Institute

OF

NEW YORK.

Names of Judges:

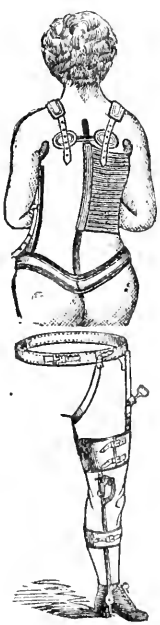
Prof. W. A. Hammond, M. D.
Prof. John C. Draper, M.D.
Prof. E. C. Seguin, M. D.
Dr. A. McLane Hamilton
Dr. Meredith Clymer.

GALVANO-FARADIC MANUFACTURING CO.,

288 Fourth Avenue,

Send for Illustrated Catalogue. NEW YORK.

For sale by W. AUTENRIETH, 71 West Sixth St., Cincinnati, O.



OLDEST HOUSE IN THE WEST!

(ESTABLISHED 1837.)

MAX WOCHER & SON,

MANUFACTURERS AND IMPORTERS OF

Surgical Instruments

—AND—

ORTHOPÆDICAL APPLIANCES.

105 West Sixth St. (Ohio Medical College Building), **Cincinnati, O.**

—o—

Our stock comprises a full assortment of Surgical Instruments in all its various branches, and to which we add constantly new inventions, approved of by the profession here and abroad.

***Apparatuses** for all kinds of human deformities we make with all the latest improvements, as recommended by the best authorities.*

An experience of over 40 years as a practical instrument-maker, together with the reputation enjoyed by us for so many years, will serve as a guarantee that all orders will be promptly and satisfactorily executed.

☞ For Reports of Actual Cases see Opposite Page. ☜

DEXTRO QUININE

an anti-
lic, Dex-
uinine
rves a
place;
r the re-
n of high
rature in
ic disea-
feel that
y regard
ro-Qui-
s equally
nt with
ner alka-
as Cin-
bark."
WM. PEPPER, A.M., M.D.,
of Clinical Medicine in the University of Pennsylvania.

e have given Dextro-Quinine an
ive trial. We are quite inclined
eve it is the best substitute for
ate of Quinine yet offered the
sion. It is given in the same
as Sulphate of Quinine, and
equally efficacious."
L. P. YANDELL, M.D.,
Clinical Medicine, Diseases Children, and Dermatology in University of Louisville.

ve used Dextro-Quinine in my especially in the treatment arial Neuralgia, and am satis-its equal value if not superiority salts of quinine."
WM. A. HAMMOND, M.D.,
Dis. Nervous System, etc., University of New York.

ave used the Dextro-Quinine zen or more cases, as a substi-or the Sulphate, and it has I to me to meet the indications well, and it strikes me as being tly worthy of extended trial."
O. COWLING, A.M., M.D.,
ouisville Medical News, and of. Operative Surgery in University of Louisville.

xtro-Quinine does not cause like Cinchonidia, and is as antiperiodic as either that or e. I give it in one-half larger As a febrifuge I have given it od effect."
A. L. LOOMIS, M.D.,
tor of logy d ce of ine, rsity he of York.

"Shall use no other antiperiodic as long as I can get Dextro-Quinine." G. W. SMITH, M.D.

"Dextro-Quinine is equal to Quinine Sulphate, grain for grain" T. W. JONES, M.D

"Dextro-Quinine is undoubtedly a very active agent. The testimony of a large number of disinterested men who have put it to the test, places it nearly or quite on a level with Sulph. of Quinine. My own experience of it accords with this view."
H. L. GIBBONS, M.D.,
Prof. of the Principles and Practice of Medicine and of Clinical Medicine, Medical Dept. of University College, San Francisco, Cal.

"I have used Dextro-Quinine in cases of intermittent and remittent fever and periodic neuralgia, in about the same doses as Quinine, and found it as effectual in every instance."
E. D. FOREE, M.D.,
Emeritus Prof. of, and Lecturer on, Diseases of Women, Hospital College of Med., Louisville. Ky.

"In intermittent and remittent fever, Dextro-Quinine has done all I expected—all I desired. It has acted promptly and *cured* promptly."
W. H. BENTLEY, M.D., L.L.D.,
Valley Oak, Ky.

"I have used Dextro-Quinine and find it in every respect equal to Sulphate of Quinine."
SAMUEL R. PERCY, M.D.,
Prof. Mat. Med., etc., N. Y. Medical College.

"In all cases of intermittent fever in which I have used the Dextro-Quinine, at the Mary and Elizabeth Hospital, it has promptly arrested the disease." JOHN E. CROWE, M.D.,
Prof. Obstetrics, etc., University of Louisville.

"I have used Dextro-Quinine and find it in every respect equal to Sulphate of Quinine."
H. LE ROY SATTERLEE, M.D., Ph.D., *Prof. of Chem., Mat. Med., and therap. in the N. Y. College of Dentistry; Prof. of Chem. and Hygiene in the Am. Vet. College, etc.*

QUININE

or original articles on the clinical use of Dextro-Quinine during the year 1879, in Remittent, Intermittent and Fevers, Pertussis, Cholera Infantum, Pneumonia, Periodic Neuralgia, etc., see communications entitled, use of Dextro-Quinine."—*Medical and Surgical Reporter*, January 25th. "Dextro-Quinine."—*Medical and al Reporter*, April 5th. "A Case of Pneumonia, etc., treated by Dextro-Quinine," etc.—*Medical and Surgical er*, December 20th. "Dextro-Quinine as an Antiperiodic."—*Ohio Medical Recorder*, March. "On Dextro-e."—*New Remedies*, March. "Dextro-Quinine as an Antiperiodic."—*N. Y. Eclectic Medical Journal*, June. ro-Quinine."—*Cincinnati Lancet and Clinic*, August. "On the use of Dextro-Quinine."—*Louisville Medews*, April 5th and May 17th "Dextro-Quinine as an Antiperiodic."—*Medical Brief*, July. "Malarial Fe-f the South."—*Southern Medical Record*, August. "Dextro-Quinine in Pertussis."—*Southern Medical Record*, iber. "Dextro-Quinine."—*Medical Summary*, (two articles), October. "Notes on Hospital and Private Prac--*Pacific Medical Journal*, October. "Dextro-Quinine."—*Western Lancet* (San Francisco), December.

ten cents for sample copy of *The Monthly Review of Medicine and Pharmacy*. Extra large quarto, 32 pages ble column reading matter, $1.00 per year. Physician's Visiting List and Ledger $1.00. *Monthly Review* and g List $1.50.

KEASBEY & MATTISON,
Manufacturers of Quinine and Other Fine Chemicals.
Nos. 328, 330 and 332 North Front Street, Philadelphia.

THE

WASHINGTON CITY ROUTE

BALTIMORE & OHIO R. R.

The Shortest, Quickest, and only Direct Route to

Washington & Baltimore.

WITH DIRECT CONNECTIONS FOR

RICHMOND, LYNCHBURG, NORFOLK, and the Southeast

Philadelphia, New York, Boston, and the East.

TRAVELERS DESIRING A

SPEEDY, PLEASANT, AND COMFORTABLE TRIP

Should remember that the

Baltimore and Ohio Railroad

Is Celebrated for its

Elegant Coaches, Splendid Hotels, Grand and Beautiful Mountain and Valley Scenery, and the many points of Historical Interest along its line.

☞Fare will always be as Low as by any other Line.

Pullman Palace Cars Run Through without Change

Between the Principal

WESTERN AND EASTERN CITIES.

For Through Tickets, Baggage Checks, Movement of Trains, Sleeping Car Accommodations, etc., etc., apply at Ticket Offices at all Principal Points.

NORTH, SOUTH, EAST, or WEST.

E. R. DORESY,
Assistant Gen'l Ticket Agent.

L. M. COLE,
General Ticket Agent.

THOS. P. BARRY,
Western Passenger Agent.

THOS. R. SHARP,
Master of Transportation

BARON LEIBIG, the greatest authority on Infant Diet, states that the majority of children who die under one year of age, do so from the effects of improper food, or from the improper administration of the food.

HORLICK'S FOOD.

A Concentrated Extract, prepared according to the Formula of Baron Liebig, and, unlike other Foods,

IS NOT FARINACEOUS.

It is acknowledged by Physicians to be the best Food

For Infants, Dyspeptics and Invalids.

Prof. J. Lewis Smith Says,

Speaking of **HORLICK'S FOOD:** "Being carefully prepared, according to Liebig's Formula, by Chemists fully competent, it possesses certain advantages, such as quick and easy preparation and a pleasant flavor, and is therefore highly esteemed by those who have used it." [*Page 58 of the fourth edition of a Treatise on Diseases of Infancy and Childhood. By J. Lewis Smith, M. D., etc.*—1879] Also, speaking in another place [page 647] of artificial food for infants, especially those suffering from intestinal catarrh, he says: "I prefer Liebig's, especially **HORLICK'S** preparation of it."

Report from Bellevue Hospital, New York.

In *The Hospital Gazette* for February 6th. 1879 [page 108] Dr. E. Hochheimer makes a report from BELLEVUE HOSPITAL of a case of Infantile Paralysis, which was followed by an exhausting diarrhœa—Speaking of the treatment, he says: "Her condition continued unchanged for the next three weeks; she was put upon a diet consisting principally of milk, but the diarrhœa persisted in spite of opiates and astringents."

"*Nov. 17th.—Milk was stopped, and she was put upon a diet of HORLICK'S FOOD; after this she began to mend, the diarrhœa became less and finally disappeared; she began to gain flesh, and her general condition was much improved.*"

We also beg to refer, by permission, to the following eminent medical men, who have used our Food extensively in their practice :— **Prof. DeLaskie Miller,** (Rush Medical College); **Prof. Wm. H. Byford,** (Chicago Medical College); **Prof. J. Adams Allen,** (Rush Medical College); **Drs. J. P. Oliver** and **C. P. Putnam,** (Harvard Medical School); **Prof. Gawne,** (Cleveland Medical College); and several hundred others, whose testimonial letters are on file in our office.

PRICE, 75 Cents per bottle. **Trial Size, 40 Cents.**

SOLE MANUFACTURERS:

J. & W. HORLICK & CO., Racine, Wis.

WHOLESALE AGENT,

Oscar KRESS,

1670 Broadway. New York.

LONDON AGENTS.

F. NEWBERY & SONS,

37 Newgate St., London, E. C., Eng.

☞ *Physicians will confer a special favor by sending for sample, which will be promptly and cheerfully furnished, either by the manufacturers or their Wholesale Agent*

"In Malted Barley we have an unlimited supply of diastatic power."—W. Roberts, M. D., F. R. S., in *London Practitioner.*

Trommer
EXTRACT OF MALT.

OPINIONS OF THE MEDICAL PRESS.

"Using Trommer Extract with excellert results; very serviceable in certain forms of dyspepsia; agrees with the most fastidious stomach."—*Canada Lancet, Toronto.*

"Converts starch into glucose and dextrine rapidly and in large quantity. Seems to be steadily increasing in favor for diseases involving impaired nutrition."—*London Lancet.*

"There are many conditions in infancy, old age and debility, where a physician, once acquainted with the value of this Extract, would be at a loss to replace it."—*Medical and Surgical Reporter, Phila.*

"During convalescence from fevers, in cases of phthisis, in certain forms of dyspepsia, and generally in all cases of malnutrition, we have found it of very great value."—*Ohio Medical Recorder.*

"There are few remedies which, to a greater extent, offer *a priori* grounds for their use. The clinical evidence, too, which has sanctioned the physiological claims of Malt Extract, is abundant."—*Louisville Medical News.*

"Adapted to a wide range of cases requiring supplementary food; acceptable to the stomach; aids digestion; an excellent vehicle for other medicines; and will keep in the hottest climate."—*Medical Journal, Wilmington.*

"The Trommer Company has hitherto taken the lead in the introduction of the Extract of Malt. The uniformity and reliable character of this Extract has induced an enormous demand and sale."—*Obstetric Gazette, Cincinnati.*

"Employed with great advantage in the wasting diseases of children, both as a nutrient and to improve digestion."—*Cincinnati Medical News.*

"One of the best of the various preparations of a similar character. Prof. Redwood finds Trommer's Extract has all the power of acting on amylaceous bodies."—*London Chemist and Druggist.*

"Too well known to need commendation. Malt fills a place in the treatment of disease of the utmost utility."—*Courier of Medicine, St. Louis.*

"Has grown so rapidly in favor with the profession that there are few practitioners in Canada who do not regularly prescribe it."—*Canada Medical Record.*

"The Trommer Company was the first to bring prominently before the American profession the virtues of Malt Extract. As a Malt Extract we have no hesitancy in saying that there is no brand in the market its equal in every respect."—*Medical Advance, Detroit.*

"Eminent practitioners, including most of the leading teachers, speak of it in the highest terms. Independently of the obvious merit of the preparation there is in its favor a mass of clinical evidence."—*London Medical Record.*

"There is no scarcity of good alimentary articles, but there is an objection to most of them that they will not keep. This makes our estimate of Trommer's Extract of Malt higher each season. It will keep in the hottest climate."—*N. C. Medical Journal, Wilmington.*

The Trommer Extract Company is engaged exclusively in the manufacture of Malt Extract, "plain," and in such combinations as have been suggested and approved by some of the most eminent members of the profession in Europe and America. Notwithstanding the large demand, they are enabled, by unremitting personal attention to all the details of the manufacture, to maintain the excellent quality which has established the reputation of their preparations on both sides of the Atlantic.

COMPARATIVE VALUE

OF

MALTINE AS A CONSTRUCTIVE.

It has been clearly shown by the most distinguished chemists in this country and Europe, who have made comparative analyses of MALTINE and Extracts of Malt that, quantitatively, MALTINE contains from two to three times the nutritive and digestive properties that are found in the best Extracts of Malt in the market.

This fact has been amply demonstrated by the concurrent opinion of the most eminent medical authority in the world; and the practical experience of nearly the entire Medical Profession of the United States and Great Britain proves beyond question that MALTINE, as a Constructive, is by far the most valuable product yet presented for the consideration of scientific medical men.

Being supplied at the same prices as the ordinary Extract of Malt, and *containing fully double the quantity of Diastase and nutritive elements to be found in the best of them*, it can be prescribed at less than one-half the expense.

Ann Arbor, Mich., September 25, 1880.

An increasing experience in the use of MALTINE confirms my former opinion as to its great therapeutic value, and I should hardly know how to get along without it.

E. S. DEMSTER, M. D.,
Prof. Obstet. and Dis. Wom. and Children, Univ. of Mich., and in Dartmouth College.

In comparison with the alcoholic Malt Extracts, your MALTINE is about ten times as valuable, as a flesh former; from five to ten times as valuable, as a heat producer; and at least five times as valuable, as a starch digesting agent.

PROFESSOR ATTFIELD, F.C.S.,
Professor of Practical Chemistry to the Pharmaceutical Society of Great Britain.

MALTINE is superior in therapeutic and nutritive value to any Extract of Malt made from barley alone, or to any preparation of one variety of grain.

PROF. R. OGDEN DOREMUS.

In its superiority to the Extract of Malt prepared from barley alone I consider it to be all that is claimed for it, and prize it as a very valuable addition to the list of tonic and nutritive agents. C. H. LEWIS, M. D., *Jackson, Mich.*

The following is an extract from a report of WM. PORTER, A. M., M. D., *St. Louis, Mo.*

After a full trial of the different Oils, and Extract of Malt preparations, in both hospital and private practice, I find MALTINE most applicable to the largest number of patients, and superior to any remedy of its class.

PROF. L. P. YANDELL, in *Louisville Medical News*, says:—MALTINE deserves to stand in the front rank of the constructives; and the constructives, by their preventive, corrective, and curative power, are probably the most widely useful therapeutical agents that we possess.

Ann Arbor, Mich., July 2, 1880.

GENTLEMEN:—The preparations of MALTINE I have already used have impressed me as being not only superior to Barley Malt, as a nutrient tonic, but as furnishing an admirable vehicle for the combination of other tonics. The preparations with Cod Liver Oil, with Pepsin and Pancreatine, and with Phosphates, as well as the Malto-Yerbine, I have especially liked. I have used no "Barley Malt" since I have been able to obtain the MALTINE.

W. F. BREAKEY, M. D.,
Professor University of Michigan.

Address REED & CARNRICK,

196 Fulton Street,

NEW YORK.

Maltine with Peptones.

Maltine with Peptones is a combination of the nutritive properties of malted barley, wheat, and oats with beef, perfectly digested and ready for rapid assimilation. The starch in the cereals is converted into glucose by the action of the diastase, the nutritive properties of the beef, and the albuminoids of the malted grains are converted in Peptones by the action of the digestive agents of the gastric juice and pancreas, in which form they are assimilated.

Maltine with Peptones contains no inert matter. The digestive agents are applied only to the nutritious principles, these elements being perfectly separated from the refuse matter.

Whenever natural digestion is partly or wholly in abeyance, in mal-nutrition, gastric and intestinal lesions, alimentation in fevers, pulmonary affections, and all wasting diseases, we have the utmost confidence that this preparation will meet the fullest expectations of the profession. It is by far the most important production of our house during the past twenty years.

—o—

Chemical Report on Maltine.

By WALTER S. HAINES, M. D.,
Professor of Chemistry and Toxicology, Rush Medical College, Chicago.

CHEMICAL LABORATORY OF RUSH MEDICAL COLLEGE,
CHICAGO, *November* 18, 1879.

In order to test the comparative merits of Maltine and the various extracts of malt in the market, I purchased from different druggists samples of Maltine and of the most frequently prescribed extracts of malt, and have subjected them to chemical analysis.

As the result of these examinations, I find that Maltine contains from half as much again to three times the quantity of phosphates (nerve and brain food and bone producers), and from three to fourteen times as much diastase and other albuminoids (digestive agents and muscle producers), as any of the extracts of malt examined. Since the value of such preparations is indicated very exactly by the proportion of these—their two most important constituents, I have no hesitation in pronouncing Maltine greatly superior to any extract of malt which I examined.

The large amounts of phosphates and albuminoids found in Maltine demonstrate, moreover, the superior skill and care employed in its preparation, and thoroughly warrants the confidence placed in it by the medical profession.

Very respectfully,

WALTER S. HAINES.

Address REED & CARNRICK,
196 Fulton Street,
NEW YORK.

MALTINE IN PULMONARY PHTHISIS.

The great value of MALTINE in all wasting diseases, and especially in Pulmonary affections, is becoming more and more apparent to the Medical Profession.

Since we issued our pamphlet on MALTINE one year ago, we have received nearly one thousand commendatory letters from the Medical Profession from most parts of the world, a large portion of which speak enthusiastically of it in Pulmonary affections.

Any Physician who will test MALTINE, Plain, in comparison with Cod Liver Oil, in a case of Pulmonary Phthisis, will find that it will increase weight and build up the system far more rapidly. There are, however, many cases when the compounds with Hypophosphites, Phosphates, Peptones, Malto-Yerbine, and Pepsin and Pancrealine are strongly indicated.

After full trial of the different Oils and Extract of Malt preparations, in both hospital and private practice, I find MALTINE most applicable to the largest number of patients, and superior to any remedy of its class. Theoretically, we would expect this preparation, which has become *practically officinal*, to be of great value in chronic conditions of waste and mal-nutrition, especially as exemplified in phthisis. Being rich in Diastase, Albuminoids and Phosphates, according to careful analysis, it aids in digesting farinaceous food, while in itself it is a brain, nerve and muscle producer. WM. PORTER, A. M., M. D., *St. Louis, Mo.*

---

123 *Landsdowne Road, Notting Hill, W. London, October* 16, 1880.

I have used MALTINE with Cod Liver Oil with the happiest results in a case of tuberculosis attended with tubercular peritonitis, in which the temperature of the patient rose to 105 1-5° and persistently remained above 100° for upwards of two months. The only medicine taken was MALTINE with Cod Liver Oil, and an occasional dose of Carbonate of Bismuth, to check Diarrhœa. She gradually improved and made a perfect recovery. I find MALTINE with Cod Liver Oil is more readily taken and more easily assimilated than Cod Liver Oil in any other form.

EDMUND NASH, M. D.

Kensington Dispensary, London, November 24, 1879.

We are using your MALTINE among our patients, and find *great benefit* from it, especially in cases of phthisis. DR. CHIPPENDALE, *Resident Medical Officer.*

The Beeches, Northwold, July 28, 1879.

I find that my patients can readily digest your MALTINE with Cod Liver Oil without causing any unpleasant after-feeling. I have full confidence in the virtue it possesses to sustain the system during prolonged diseases of a tubercular or atrophic nature. FREDERICK JOY, L.R.C.P., M.R.C.S.

PROF. L. P. YANDELL, in *Louisville Medical News, January* 3, 1880:—MALTINE is one of the most valuable remedies ever introduced to the Medical Profession. Wherever a constructive is indicated, MALTINE will be found excellent. In pulmonary phthisis and other scrofulous diseases, in chronic syphilis, and in the various cachectic conditions, it is invaluable.

Adria, Mich., February 16, 1880.

I have used your MALTINE preparations in my practice for the past year and consider them far superior to the Extract of Malt. I have used your Malto-Yerbine in my own case of severe bronchitis that has troubled me for the past five years. It has done me more good than anything I have ever tried. J. TRIPP, M. D.

New Richmond, Wis., August 14, 1880.

After having given several of your elegant MALTINE preparations thorough trial, I have found none of them to disappoint me. I consider it invaluable and as indispensable to the profession as opium or quinine. F. W. EPLEY, M. D.

Address REED & CARNRICK,

196 FULTON STREET, NEW YORK.

During The Past Year.

We placed Maltine and several of its compounds in the hands of one hundred leading Physicians of the United States, Europe, Australia and India with a request that they thoroughly test it in comparison with other remedies which are generally used as constructives in Pulmonary Phthisis and other wasting diseases.

From the tone of the seventy reports already received, fifteen of which are upon comparative tests with the principal Extracts of Malt in the market, we are fully justified in making the following claims, viz.:

FIRST:—The Maltine (Plain) increases weight and strength far more rapidly than Cod Liver Oil or other nutritive agents.

SECOND:—That Maltine, Maltine with Peptones, and Maltine with Pepsin and Pancreatine, rapidly correct imperfect digestion and mal-nutrition in wasting diseases.

THIRD:—That Maltine is the most important constructive agent now known to the Medical Profession in Pulmonary Phthisis.

FOURTH:—That Maltine causes an increase in weight and strength one and a half to three times greater than any of the Extracts of Malt.*

LIST OF MALTINE PREPARATIONS.

MALTINE—Plain.
MALTINE with Hops.
MALTINE with Alteratives.
MALTINE with Beef and Iron.
MALTINE with Cod Liver Oil.
MALTINE with Cod Liver Oil and Iodide of Iron.
MALTINE with Cod Liver Oil and Pancreatine.
MALTINE with Cod Liver Oil and Phosphates.
MALTINE with Cod Liver Oil and Phosphorus.
MALTINE with Hypophosphites.
MALTINE with Iodides.
MALTINE with Peptones.
MALTINE with Pepsin and Pancreatine.
MALTINE with Phosphates.
MALTINE with Phosphates Iron and Quinia.
MALTINE with Phosphates Iron, Quinia and Strychnia.
MALTINE Ferrated.
MALTINE WINE.
MALTINE WINE with Pepsin and Pancreatine.
MALTO-YERBINE.

* MALTINE is a concentrated extract of malted Barley, Wheat and Oats. In its preparation we employ not to exceed 150° Fahr., thereby retaining all the nutritive and digestive agents unimpaired. Extracts of Malt are made from Barley alone, by the German process which directs that the mash be heated to 212° Fahr., thereby coagulating the Albuminoids and almost wholly destroying the starch digestive principle, Diastase.

We will forward gratuitously a $1.00 bottle of any of the above preparations upon payment of the expressage. Send for our new twenty-eight page pamphlet on MALTINE.

LABORATORY, Yonkers on the Hudson. Address

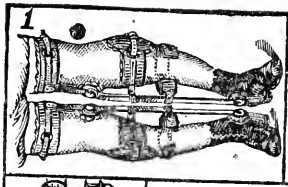
REED & CARNRICK,

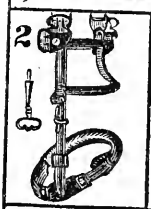
196 Fulton Street, NEW YORK.

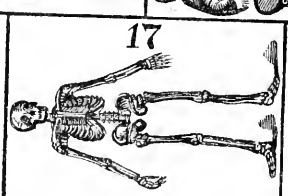
Any of these Works sent by mail on receipt of price, by addressing MEDICAL NEWS, 121 West Seventh Street, Cincinnati, O.

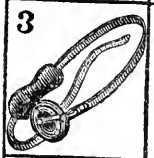
	Price.
Air and its Relation to Life, by Hartley	$1.50
Anstie on Neuralgia	2.50
Agnew's (D. Hayes, M. D.) Practical Anatomy, Illustrated	2.00
Ashurst's (John, Jr.) Injuries of the Spine	1.50
Anstie, Francis E., M. D., on Epidemics	75
A Manual of Minor Surgery and Bandaging, by Ch. Heath, with 86 Engravings.	2.00
Anatomical Atlas, by Smith and Horner, with 600 Illustrations.	4.50
Bartholow's Materia Medica and Therapeutics	5.00
Bastian on Paralysis from Brain Disease	1.75
Bartholow, Prof. Roberts, M. D., Hypodermic Medication	1.50
Browne on the Ophthalmoscope, with 35 Illustrations	1.00
Bennett's (John H., M. D.) Text-Book of Physiology, Illustrated	3.00
Black's (I. R., M. D.) The Ten Laws of Health; or, How Diseases are Produced and can be Prevented	1.75
Bryant's Practice of Surgery, with 507 Engravings	6.00
Combe's Management of Infancy	1.50
Cooley's (Arnold J.) Hand-Book of Compound Medicines; or, the Prescriber's and Dispenser's Vade Mecum	1.25
Cleveland's (C. H., M. D.) Pronouncing Medical Lexicon	1.00
Cleland's Dissector	1.25
Curvature of the Spine, by Richard Barwell	1.75
Da Costu's (I. M., M. D.) Medical Diagnosis, Illustrated	6.00
Diseases and Injuries of the Ear, by W. B. Dalby, with 21 Illustrations	1.50
Diseases Peculiar to Women, by L. Atthill, M. D	2.00
Diseases of Children, by Ed. Ellis	2.00
Diseases of the Eye, by Robert B. Carter, Illustrated	3.75
Ecker's Convolutions of the Brain	1.25
Flint on the Source of Muscular Power	1.00
Flint Austin on Fevers	2.00
Flint's Analysis of the Urine	1.00
Flint on Auscultation and Percussion	1.75
Farquharson's Therapeutics	2.00
Fox's (Tilbury) Epitome of Skin Diseases	1.38
Fenwick's Guide to Medical Diagnosis	2.25
Flint's Practice of Medicine	6.00
Greenhow, E. H., on Chronic Bronchitis	1.50
Green's Pathology and Morbid Anatomy	2.25
Gosselin's Clinical Lectures on Surgery	2.50
Gross on the Urinary Organs, with 170 Engravings	4.50
Guide to the Practice of Midwifery, by D. L. Roberts, M. D., with 95 Engravings.	2.00
Guide to Human Osteology, by William W. Wagstaffe, with 23 Colored Plates and 66 Engravings	3.00
Guide to Dental Anatomy and Surgery, by Henry E. Sewill, with 77 Engravings.	2.00
Gonorrhœa and Syphilis, by Silas Durkee, M. D.	3.50
Gray's Anatomy, with 462 Engravings	6.00
Hammond's Insanity in its Relations to Crime	1.00
Howe on Emergencies	2.50
Hodge, H. L., on Fœticide	50
Heath's Practical Anatomy	3.50
Hoppe's (Dr. Cod) Percussion and Auscultation as Diagnostic Aids	50
History of Medicine, by R. Dunglison, M. D.	2.50
Hartshorne's Anatomy and Physiology, Illustrated	1.95

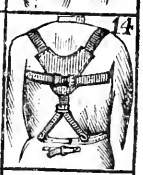
	Price.
Hill on Venereal Diseases	3.25
Hoblyn's Medical Dictionary	1.50
Holden's Landmarks	88
Hartshorne's Essentials of Medicine	2.63
Hamilton on Fractures and Dislocations, with 344 Engravings	5.75
Jones' (H. M.) Aural Surgery	1.50
Jones' (T. W.) Defects of Sight and Hearing	50
Ludlow's Manual of Examinations, Illustrated	3.25
Legg's Guide to the Examination of the Urine	75
Lyons on Fever	2.25
Lee's Lectures on Syphilis	2.25
Lawson on Injuries of the Eye	3.50
Maudsley's Physiology of Mind	2.00
Maudsley's Responsibility in Mental Diseases	1.50
Mears' (I. E., M. D.) Practical Surgery, with 227 Engravings	2.00
Mendenhall's (Geo., M. D.) Vade Mecum, Illustrated	2.00
Meadows, Alfred, M. D., Midwifery, with 145 Engravings	3.00
Morphology of the Skull, by W. K. Parker and G. T. Bettany	3.50
Neumann's Skin Diseases	4.00
Obstetric Catechism, by L. H. Orr, M. D	2.00
Obstetric Memoranda, by Drs. Rigby and Meadows	50
Practical Gynæcology, by Haywood Smith, M. D	2.00
Packard's Manual of Minor Surgery, with 145 Engravings	1.25
Power's (I. H., M. D.) Anatomy of the Arteries of the Human Body	2.50
Pereira's (I., M. D.) Physician's Prescription-Book	1.00
Playfair's Practice of Midwifery, with 166 Illustrations	4.00
Pavy on Digestion	2.00
Prescription and the Art of Prescribing	1.00
Riley's (John C., M. D.) Materia Medica and Therapeutics	3.00
Ryan's (M., M. D.) Philosophy of Marriage	1.00
Smith Edward, M. D., on Foods	1.00
Surgical Emergencies, by W. P. Swain, with 82 Engravings	2.00
Schafer's Practical Histology	2.00
Stimson's Operative Surgery, with 350 Engravings	2.50
Stokes on Fever	2.00
Swayne's Obstetric Aphorisms	1.25
Sargent's Minor Surgery, with 183 Engravings	1.75
Smith on Consumption	2.25
Slade on Diphtheria	1.25
Sturge's Clinical Medicine	1.25
Skin Diseases, by McCall Anderson	1.75
Strong Drink and Tobacco Smoke, by Henry P. Prescott, with Numerous Plates.	2.50
The Complete Hand-Book of Obstetric Surgery, by Charles Clay, M. D., with 101 Illustrations	2.00
Tanner's Clinical Medicine	1.50
Text-Book of Physiology, by M. Foster, Illustrated	6.50
Van Buren on the Rectum	1.50
West on Nervous Diseases of Children	1.00
Williams on Consumption	2.50
What to Observe at the Bedside	1.00

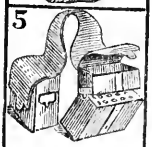


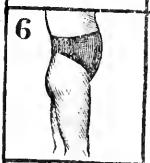


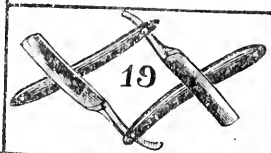


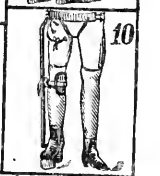


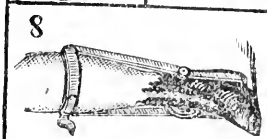


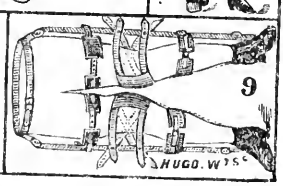












NAMES OF APPARATUS.

No. 1. Bow Leg.
2. Sayre's Hip Joint.
3. Truss.
4. Artificial Leg.
5. Saddle Bag.
6. Abdominal Belt.
7. Elastic Stocking, Knee Cap, etc.
8. Weak Ankle.
9. Knock Knee.
10. Long Hip Joint.
11. Extension Shoe.
12. Surgical Instruments
13. Crutches.
14. Shoulder Braces.
15. Spinal Apparatus, lateral.
16. Autenrieth's Club Foot Shoes.
17. Skeletons.
18. Artificial Eyes(glass).
19. Autenrieth's Razors.

Send for Circulars for Measurements.

To the Medical Profession.

LACTOPEPTINE

We take pleasure in calling the attention of the Profession to LACTOPEPTINE. *After a long series of careful experiments, we are able to produce its various components in an absolutely pure state, thus removing all unpleasant odor and taste (also slightly changing the color). We can confidently claim, that its digestive properties are largely increased thereby, and can assert without hesitation that it is as perfect a digestive as can be produced.*

LACTOPEPTINE *is the most important remedial agent ever presented to the Profession for Indigestion, Dyspepsia, Vomiting in Pregnancy, Cholera Infantum, Constipation, and all diseases arising from imperfect nutrition. It contains the five active agents of digestion, viz.: Pepsin, Pancreatine, Diastase, or Veg. Ptyalin, Lactic and Hydrochloric Acids, in combination with Sugar of Milk.*

FORMULA OF LACTOPEPTINE:

Sugar of Milk.....40 ounces	Veg. Ptyalin or Diastase.....4 drachms.
Pepsin..... 8 ounces.	Lactic Acid .....5 fl. drachms.
Pancreatine ..... 6 ounces.	Hydrochloric Acid .....5 fl. drachms.

LACTOPEPTINE is sold entirely by Physicians' Prescriptions, and its almost universal adoption by physicians is the strongest guarantee we can give that its therapeutic value has been most thoroughly established.

The undersigned having tested LACTOPEPTINE, recommend it to the Profession:

ALFRED L. LOOMIS, M. D.,
Professor of Pathology and Practice of Medicine, University of the City of New York.
SAMUEL R. PERCY, M. D.,
Professor Materia Medica, New York Medical College.
F. LE ROY SATTERLEE, M. D., Ph. D.,
Prof. Chem., Mat Med. and Therap. in N. Y. Col. of Dent.; Prof. Chem. & Hyg. in Am. Vet. Col., etc.
JAS. AITKEN MEIGS, M. D, Philadelphia, Pa.
Prof. of the Institutes of Med. and Med. Juris., Jeff. Medical College; Phy. to Penn. Hos.
W. W. DAWSON, M. D., Cincinnati, Ohio.
Prof. Prin. and Prac. Surg., Med Col. of Ohio; Surg. to Good Samaritan Hospital.
ALFRED F. A. KING, M. D., Washington, D. C.
Prof of Obstetrics, University of Vermont.
D W. YANDELL, M. D.,
Prof. of the Science and Art of Surg. and Clinical Surg., University of Louisville, Ky.
L P. YANDELL, M. D,
Prof. of Clin Med, Diseases of Children, and Dermatology, University of Louisville, Ky.
ROBT. BATTEY, M D., Rome, Ga.
Emeritus Prof. of Obstetrics, Atlanta Med. College, Ex. Pres. Med. Association of Ga.
CLAUDE H. MASTIN, M. D., LL. D., Mobile, Ala.
PROF. H. C. BARTLETT, Ph. D., F. C. S., London, England.

THE NEW YORK PHARMACAL ASSOCIATION,

Nos. 10 & 12 College Place, New York.

P. O. BOX 1574.